

THE POTTERS' MARKS OF PHYLAKOPI

Allyson Shepard Bailey

PhD
University of Edinburgh
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ABSTRACT

The Bronze Age site of Phylakopi on Melos has been excavated several times, and produced a number of "potters' marks", small symbols incised or impressed into the clay before firing. The overall development of the site and island throughout the Bronze Age is described. Then the pottery sequence is discussed. The potters' marks are subjected to computer analysis to point up any patterns of use in terms of fabric, vessel type, location of mark, type of mark, provenance of the piece, date and find spot. This process is carried out first on the material from the most recent Phylakopi excavations (1974-77), which was the most meticulously recorded, then on the material from the earlier projects (1896-99 and 1911). The same analysis is applied to comparative material from other Bronze Age sites elsewhere in the Cyclades, Crete and the Greek Mainland. Potters' marks from other areas, periods and cultures are examined to demonstrate some of the known uses of this technique. Finally the Aegean results are compared and contrasted, to extract as much information as possible about the uses and purposes of potters' marks and what they may tell us about the ceramic industry in the Bronze Age Aegean as a whole and more specifically at Phylakopi.

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LIST OF ABBREVIATIONS

The following abbreviations are used throughout:

AJA.....American Journal of Archaeology

BCH.....Bulletin de Correspondence Hellenique

BICS.....Bulletin of the Institute of Classical Studies,
London

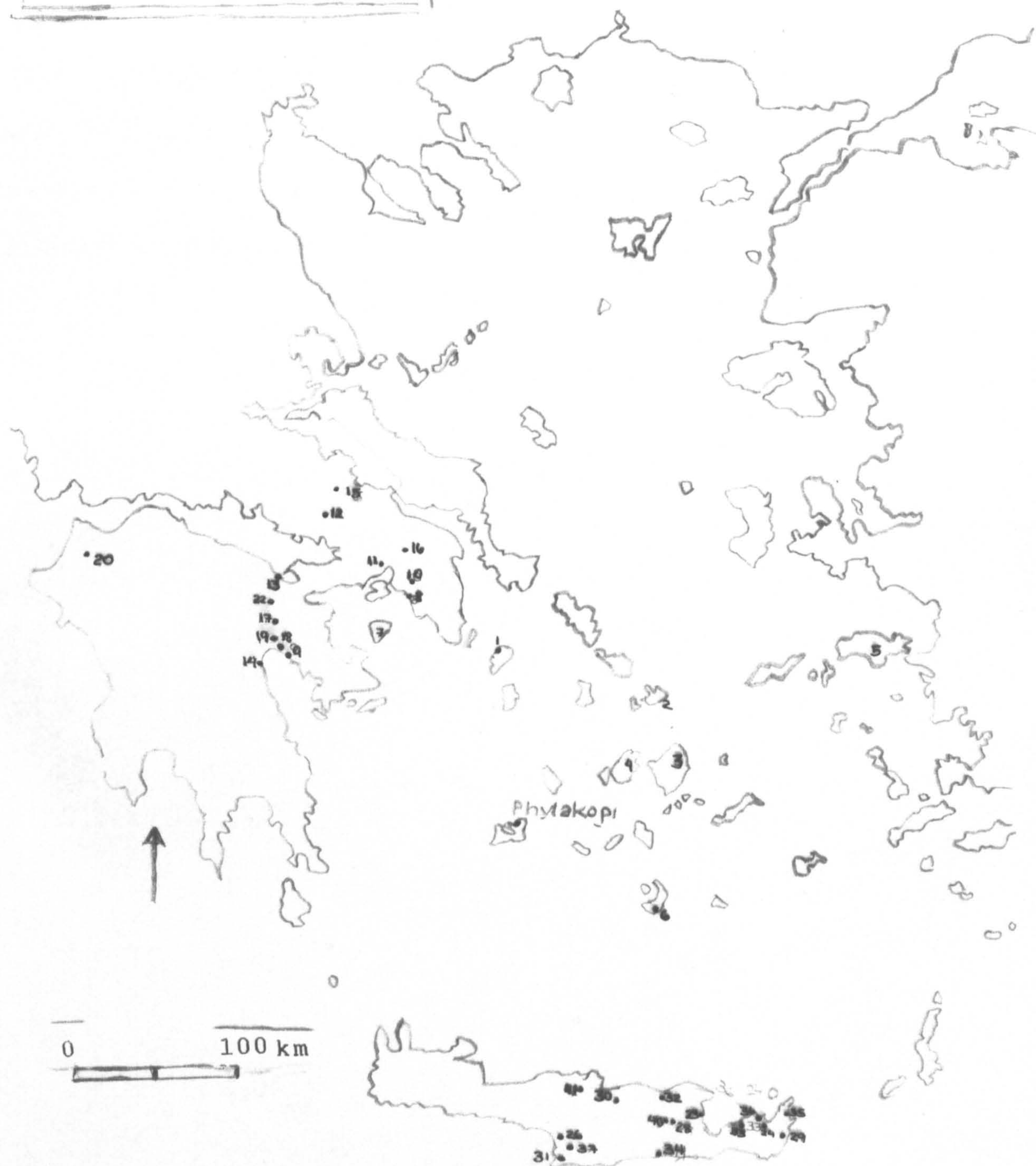
BSA.....Annual of the British School at Athens

JHS.....Journal of Hellenic Studies

The various Bronze Age phases are generally referred to in full in the first instance, and thereafter by the appropriate initials: i.e., Early Cycladic = EC, Late Minoan = LM, etc.

INTRODUCTION

The site of Phylakopi on Melos has been one of the most important sources of information on the Cycladic Bronze Age since its initial excavation in the late 19th century. Its remains span the whole of the Bronze Age, and since it was abandoned at the end of that period, they are largely uncontaminated by later intrusions. The pottery found at Phylakopi helped to establish the sequence for the Cyclades as a whole, and while that sequence has since been refined and modified to take account of subsequent work and local variations, it remains the backbone of our knowledge. One aspect of the pottery which intrigued the original excavators but has since been somewhat neglected is the potters' marks: small symbols incised or impressed into the surface of the clay prior to firing. A number of Bronze Age sites have produced such marks, but in only a few cases has a complete catalogue and analysis been undertaken. (Bikaki 1984, Godart and Olivier 1978, Zerner forthcoming) In this work I have prepared such a catalogue and analysis for the material from Phylakopi. The core material is that from Renfrew's excavation of 1974-77, which was very carefully recorded and from which no pottery was discarded. Also included are the marks from the excavations of 1896-99 and 1911, though little or no stratigraphic information is available for them. In addition, sections IV, V and VI consider Bronze Age marks from other parts of the Cyclades, the Mainland and Crete, to allow us to consider any conclusions that may be drawn



1: Map of the Aegean showing sites referred to in this paper and (inset) Melos. See over for key to site names

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about the use of potters' marks in different but mutually familiar areas.

However, it would be of little use to study the marks in isolation, and therefore I begin by first giving a brief history of the site of Phylakopi and the work that has been done there, in order to establish the historical sequence of events. I then examine the pottery sequence in more detail to give us a chronological framework for the study of the potters' marks.

SECTION I- HISTORY OF THE SITE

Archaeological interest in, and exploration of, the island of Melos really began in the mid-19th century. The first person to describe the site of Phylakopi was Ferdinand Duemmler, who visited the island in 1885. He gave a brief description of the area and such remains as were visible: namely a large wall running around the perimeter of the site, containing a jumble of smaller walls (Duemmler 1886 p.27). His main interest was the tombs lying to the S and W of the town. He described them in some detail as being of two types: cists, sometimes lined or roofed with slabs, and rock-cut chambers (ibid p.29). He regarded the change from one type to the other as the result of different geology, for the rock-cut tombs were situated in an area of tufa and pumice, different from the area of the cists. It has since been recognised that the rock cut tombs are generally later (Doumas 1977 p.53), though Deummler's observation may still have a certain validity.

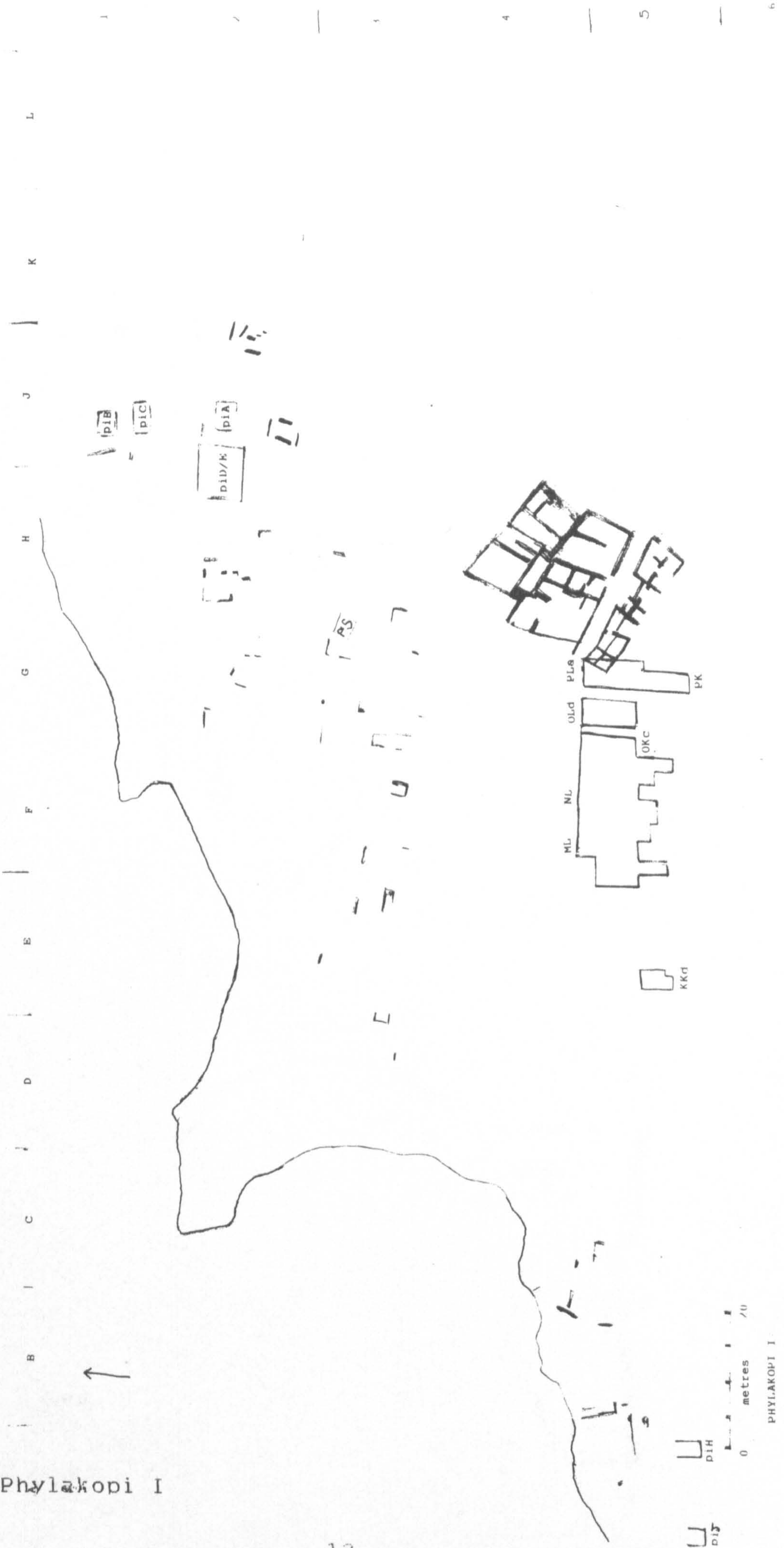
Duemmler had worked on several Cycladic islands, and he considered the pottery he found at Phylakopi in relationship to that from other sites. He described two different wares: a rather coarse reddish or gray fabric with white inclusions, and a finer ware with brown and red paint (ibid). This finer ware ("young Mycenaean") was found in the rock-cut graves and in the town itself (ibid p.30). From his observations Duemmler deduced that the differences he saw throughout the islands were the result of a long development (ibid p.32) and established that the Phylakopi material filled a gap between the time of the

cist graves and the Mycenaean period (Atkinson et.al. 1904 p.80).

However, it was not until 1896 that Phylakopi was to be thoroughly explored. A team from the British School at Athens spent three seasons excavating there. With a methodical approach rare at the time, the site was divided into 20 metre squares, labelled A to L from W to E, and 1 to 6 from N to S. (The reader should remain aware of this inversion of current practice.) They excavated an area of over 400 square metres to reveal a complex system of walls, which eventually resolved themselves into three main periods of building (Figure 2a,b,c,). Some very early pottery was also found pre-dating the first building phase. This "Pre-city" material was very like that found in cist graves elsewhere in the Cyclades: handmade, coarse and poorly fired, with a red or brown burnished surface (Atkinson et al 1904 p.83). It is discussed in more detail in Section II below. (p.53 ff. Throughout this introductory section, some general remarks are made on the pottery from various periods of the site. All the different wares found are discussed individually, in roughly chronological order, in Section II.)

The first building period, or City I, could only be exposed here and there because of the overlying deposits, and so consists of scattered walls about which relatively little can be said. They were built on the bedrock, of

2a: Phylakopi I



2b: Phylakopi II



2c: Phylakopi III



A

B

C

D

E

F

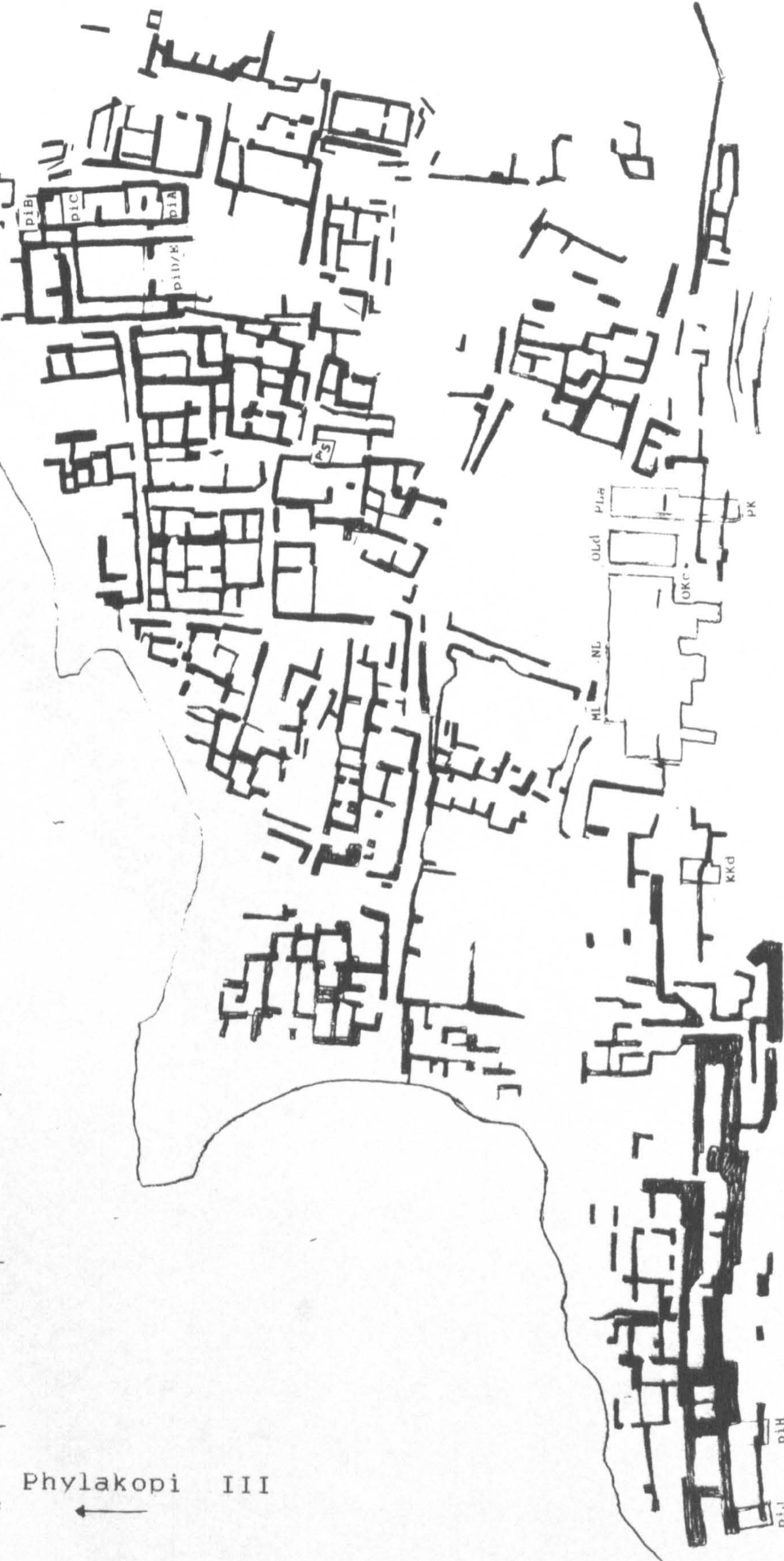
G

H

J

K

L



0 20
metres
PHYLAKOPI III

small stones covered with an "earthy" plaster (Atkinson et.al 1904 p.38). Although only a few walls were revealed, they were found across the whole of the site, indicating that City I covered much of the area of its successors, though perhaps not so densely. Near the centre of the site an intramural pithos burial of a child was found (ibid p.15).

The pottery of the period included a very coarse type with impressed geometric decoration, a finer ware, polished or "glazed" and some with lustrous painted decoration, most of which the excavators believed was imported (ibid p.85-86). There were several types of painted ware: this lustrous version, another with matt black decoration on light slip, and a less common type with white on lustrous black (ibid p.93). Another large class was named "Early Dark Faced". It was an improved version of the earliest ware, sometimes incised, the incisions sometimes filled with white paste (ibid p.87).

The houses of City I were destroyed, the walls broken down to a height of two or three feet, and new buildings replaced them, also founded on bedrock (ibid p.28). The excavators found no architectural connections between the two periods, though there was nothing to show whether the building of City II was gradual or done as one organised project (ibid). In some areas a layer of earth suggested to the excavators that part of the site was unoccupied for a time between the two phases (ibid), though these could simply have been spaces for gardens, for example.

City II was the best preserved of the three, having escaped both the deliberate destruction of City I and the erosion which affected City III. It was a well organised settlement, with streets laid out in a NS-EW grid. A large number of buildings were revealed, though the difficulty of deciding what was roofed and what open made it difficult to determine house plans (ibid p.39). The most remarkable features assigned to this period were two sets of rooms with square pillars, one of which was decorated with frescoes, including the now famous "Flying Fish" (ibid p.17). These were even more interesting in the light of a similar pillar room discovered at Knossos. (See below p.24 for the current interpretation of this area.) Also interesting was the discovery of coarse vessels with lumps of bronze stuck to them, perhaps indicating the beginning of a bronze smelting industry (ibid p.13).

In general the walls of this period were well built (ibid p. 42), mostly of rubble though in some cases they were coursed (ibid p.48). One room had a marble pavement (ibid p.11), and at least one wall had an ironstone facing (ibid p.22), perhaps a similar concept to the gypsum slab dadoes in Crete. Some plaster with semi-cylindrical impressions was found, suggesting that the roofs were made of large reeds plastered over, a practice still current on the island at the time of the excavation (ibid p.49).

It should perhaps be mentioned here that although nearly

all the graves mentioned above had been rifled, some intact material in one semicircular so-called "tholos" tomb (unillustrated) appeared to have been of early City II date (ibid p.23).

City II seems to have been at least partially fortified: at the SW extremity of the site was the "Great Wall", running E-W in a series of offset sections and making a right angled turn N at the W end (ibid p.5). Further E the wall was not cleared below a depth of one metre, only revealing the City III material, and so it was not determined if the fortification continued in that direction during the life of City II. The assumption was that the wall was built during City II and strengthened in the next period (ibid p.31). It is discussed in more detail below. (p.26)

Painted geometric pottery continued into the second city on a "soft and granular" light coloured fabric , but the designs became more curvilinear and "naturalistic." Some "Early Mycenaean" wares began to appear, with decoration in matt black (ibid p.108) or matt black with lustrous red detail (ibid p.119) Gradually, the decoration became entirely lustrous (ibid p.129).

City II was also destroyed, though less thoroughly than its predecessor, and a layer of debris levelled across the site, on which City III was built. As mentioned above, City III has been badly eroded, and so a less complete plan can be seen. It was built on the same orientation as

City II, with streets following the same alignment--which seems to show that no very great time separated the two phases. The streets of City III were well drained (ibid p.13), an amenity which was also a feature of more elaborate sites such as Pylos and Knossos. In one or two places "baths" and "sinks" were found, giving into the drains (ibid p.53).

Another indication of Mycenaean influence was a "palace", built late in the life of City III to the plan already known on the mainland: a long "megaron" with a central hearth (inferred, in this case, from a gap in the flooring with some burning (ibid p.57,79)). The building boasted a concrete floor. There may have been a bathroom at the N end, though no evidence is given in the report for this identification (ibid). On the N side was a courtyard, with a well lined with earthenware cylinders (ibid p.58). Most of the pottery infilling it was Mycenaean (ibid p.20).

With a few exceptions, the workmanship on the buildings was not as good as in the previous period (ibid p.58). Walls and floors were coated with plaster or, in some cases, the floors were paved. No signs of columns or pillars were found, except for two basalt bases (ibid p.59).

The pottery of City III was, excluding the coarse wares, almost entirely Mycenaean (though some of the pieces given that name are now known as Late Minoan), and apparently

imported. There was some painted "Later Local" pottery (ibid p.160).

Perhaps the most important aspect of the 1896-99 excavation was the establishment of a pottery sequence for the whole of the Bronze Age. Two trenches were dug specifically to record the variations in pottery at half-metre intervals (ibid pp. 12,162). The sequence itself is set out in some detail below (p.53 ff.) but it should be mentioned here that it provided a relative chronology not only for Phylakopi but for the rest of the Cyclades as well; a chronology which, though modified and fine tuned by later work, has stood the test of time quite well.

In 1911 a further small excavation using the original grid was carried out by R.M. Dawkins and J.P Droop, whose main intention was to fill in details in the pottery sequence (Dawkins and Droop 1911 p. 3). Their findings, and a recent re-analysis by R.L.N. Barber, are discussed in section II below (p.53 ff.). The excavation confirmed the original picture of three successive settlements, and followed the inner face of the town wall further E than it had been uncovered before. More intramural infant pithos burials were found, eight of them under City I walls, indicating a very early date.

Over 60 years later, archaeologists again turned their attention to Phylakopi. In the intervening years excavation and research had greatly expanded the understanding of the Aegean Bronze Age. The relative and absolute chro-

nologies had been further refined, Linear B translated, and advances in scientific technology allowed the identification of some clay and metal sources, throwing new light on trade and external contacts. In addition to these and other new techniques, two particularly important sites had been excavated, Ayia Irini on Kea and Akrotiri on Thera, greatly enhancing the picture of the Cyclades in this era. Phylakopi remained a very important site, and it was felt that it merited further work. A meticulously recorded excavation was carried out by Colin Renfrew between 1974 and 1977.

The aim of this new project was to establish a more detailed stratigraphic sequence especially for the later periods (Renfrew 1985 p.6). The excavation concentrated on an area corresponding to squares F5 and G5 on the original grid, which was largely unexplored, as well as opening several small trenches within H-J 1-3, the area of the "megaron." Although following the original grid as closely as possible, Renfrew devised a new nomenclature based on 10m squares, with 5m subdivisions. The former were labelled with capital letters, corresponding to the old grid letters, the latter with lower case. The small trenches in the megaron were designated by the Greek letter pi, with the Roman letters A-E, S and T given to each trench. Renfrew's system will be used in all discussions of his excavation and of the finds therefrom, but the relationship of this to the original grid is shown in figure 2a-c for cross reference. (See also figure 3 for the various

phases, and the stratigraphic relationship of contexts which produced potters' marks.)

As might be expected, certain subdivisions of the original sequence were identified, particularly in the previously little known " Pre-City" period, named by Renfrew Phylakopi 0. Remains of this period were found most clearly in trench piB , with some traces in piC and piD/E. Some early material was also found to the W of the fortification wall (Renfrew 1982a p.36). Although the original excavators found no structures associated with this period, traces of a wall were found in piB. (Evans and Renfrew 1984 p.64) Other than this, the Pre City material consisted almost entirely of pottery, with some marble vessels and figurine fragments (ibid p.66) and some obsidian. The pottery allowed the identification of two phases in Phylakopi 0, called A1 and A2 (ibid p.64). These correspond to the more general periods ECI and ECII, which roughly correspond to the periods covered by Renfrew's Grotta-Pelos and Keros-Syros "cultures", after the sites whose material is used to characterise these periods (Renfrew 1972 p.146). Little can be said about A1, but in A2 the culture appears to become rather more complex, as shown by the discovery of an imported Folded Arm Figurine and two sealstones (Renfrew 1982a p.37). Perhaps unsurprisingly, the finds from the 1974-77 excavation allowed certain changes and refinements in the ceramic sequence. They are discussed in Section II below (p.53 ff.).

Phase B, which corresponds to late City I and ECIII, produced rather more in the way of structures, including two successive floors (123 and 120) associated with different walls (305 and 304), indicating at least some rebuilding (as is only to be expected in a period lasting roughly 300 years, from 2300-2000bc. (Renfrew 1978 p.405, table II)). The rooms of phase B produced a large amount of pottery and domestic items such as quernstones. This is also the period when rock-cut tombs replaced cists (Renfrew 1982a p.38).

Period I ended with an apparently universal destruction (Barber 1987 p.143), as had been seen in the earlier excavations. The next phase was designated phase C, period II, and corresponds to City II, covering most of the Middle Cycladic period. Material from phase C was recovered from trenches piC--including a sequence of six successive floors-- piD/E and PLa. There were two particularly important findings for this period. The first was the discovery of different phases in the fortification wall--in trench KKd evidence was found of structures of both LCI and LHIIA date, while in PK it was shown that an outer wall of LBI date was thickened in LHIIA, then replaced by LHIIIA (Renfrew, Whitelaw and Scarre, forthcoming p.32¹). Barber has suggested that the W part of the

1. I read the forthcoming volume on Phylakopi in draft form, before the final pagination was set. The page numbers for any reference entitled "forthcoming" are therefore counted within the chapter itself, i.e. this reference is to the 32nd page of the chapter by Renfrew, Whitelaw and Scarre, not to page 32 of the volume as finally published.

wall was built in the MC period, to block the neck of the promontory on which the city stood, and the rest was added in the LBA, when the harbour had begun to silt up, exposing more of the settlement to assault (Barber 1987 pp. 67-68).

The second discovery applies to the pillar rooms with their frescoes, which are also now dated to LBI, rather than MC as was previously thought (Renfrew 1982a p.38). The misunderstanding seems to have come about because these rooms were found in the second phase of building counting down from the surface (Renfrew 1978 p.405). It therefore appears that in contrast to the previously accepted picture, MC Phylakopi had no public or specialised buildings (Renfrew 1982a p.38). It looks as if, after the destruction of City I, there was a period of "consolidation, retrenchment and revival" (Barber forthcoming p.157). By the end of phase II, Phylakopi may have been the only permanently inhabited site on Melos (Renfrew 1982a p.37). This tendency to nucleation of settlement can be seen on other islands at the same time (Barber 1987 p.57). The possible mechanisms and reasons for this change are discussed below (p.30-31).

Like its predecessor, City II was destroyed (Barber 1981 p.2) and a new town was built on the remains. The time span covered by the original City III has been subdivided by Renfrew into period III, corresponding to LHI and II, and period IV, covering LHIII. Period III is also phase D, while IV is further subdivided into E (LHIIIA) and F

(LHIIIB/C) (Renfrew 1978 p.405 table II).

A number of important structures were found, whose very meticulous recording allowed the chronology of City III to be so refined. To consider them in more or less chronological order: The first fortification of the site, and the pillar room and frescoes can now be dated to LHI (ibid p.403). A new discovery was a large building underlying the Mycenaean megaron. At the bottom of LHIIIA1 fill, through which the megaron was built, was a fragment of a Linear A tablet. It was possibly left behind when the building, now referred to as the mansion, was levelled to build the megaron (Renfrew 1977 p.112). The discovery of a tablet in a larger than usual building probably indicates that it had some administrative status, which together with the building of fortifications shows that the society of early City III was more complex and perhaps more important than previously. The use of Linear A reveals a strong link with Minoan Crete, a feature noticed early on in the pottery. Renfrew considers that the tablet was made locally (ibid p.117), which would mean that the Melians were either run by Crete or had taken over the writing system for their own use.

Trench piS explored the area of the Pillar Room described in the original report, and found more fresco fragments--but associated always with phase D pottery, rather than phase C, indicating a LHI-II date. (Renfrew 1978 p.411) These features enhance the picture of a period

of great Minoan influence at Phylakopi, probably encouraged by the great increase in external contacts which is characteristic of City III.

The mansion was replaced by the megaron described above. (p.18) The form is unmistakably Mycenaean, and bears out the generally accepted picture of the Mainland culture replacing the Minoan as the dominant power in the Aegean. This took place during phase E.

The original excavators noted that the fortification wall was rebuilt or strengthened during the City III period (Atkinson et.al. 1904 p.31). The new excavation dated the rebuilding to LHIIIB1, or phase F (Renfrew 1978 p.408).

Also dated to this phase is the only definitely specifically religious building complex so far discovered at Phylakopi. Such is its importance that Renfrew devoted an entire volume to an exhaustive explanation of its excavation and interpretation (The Archaeology of Cult). The complex consisted of an E shrine, a W shrine, and a courtyard area. Part of the rebuilding of the city wall is associated with the E shrine. The history of the group can be resolved into five main events: first, the construction of the W shrine and its early use (phase 1a-1c. It should be borne in mind that all the numbered phases of the shrine lie within phase F of the site as a whole.) The construction of the E shrine and the addition to the city wall came next, followed by a period of use of both shrines (phase 2a and 2b). After some 150 years, a portion

of the city wall collapsed causing damage to both shrines. A blocking wall was built, cutting off a portion of the W shrine, though the rest of it and the E shrine continued in use (phase 3a-3c). Finally, around 1090bc the shrine complex (and indeed the whole site) was abandoned.

Not unnaturally, the shrine produced a number of unusual finds. Many of them were terra cotta figures and figurines, both human and animal, of which the most famous is the Lady of Phylakopi, found in a niche in room A of the W shrine, in a deposit dating to phase 2b, although she herself appears to have been made up to two centuries earlier, on the Mainland (LHIIIA. Renfrew 1985 p.414). The excavators also found numbers of beads (ibid p.377), two bronze "smiting god" figurines (pp.304-305), an Egyptian scarab (p.300), a sheet gold head (p.302-303) and pieces of ostrich egg shell. All of these objects clearly indicated that these buildings were of some importance, most probably religious, as shown by the terra cottas; though the finds included more common domestic pottery and other objects of stone, bone, bronze and shell.

The more carefully controlled nature of Renfrew's excavation allowed a more detailed survey of the pottery sequence to be made, and as a result the history of the pottery industry and its stylistic development is more thoroughly understood. It is discussed in detail below, (p.49 ff.) but the main trends are: the characteristic MC fabric Cycladic White developed into Later Local, which

imitated Minoan shapes. A red washed ware replaced Dark Burnished, but was never as popular as its predecessor (Barber forthcoming p.5a). Later in the period, of course, these local products were overwhelmed by the ubiquitous Mycenaean pottery.

In conjunction with the excavation, a survey of the whole island was carried out, recording monuments from every period of its history. This enabled a number of hypotheses to be drawn up concerning patterns of settlement, land use, industry etc., and, of most value to our present work, a number of interesting features of Bronze Age Melos were revealed.

The island appears to have been visited at least from the Upper Paleolithic period, because Melian obsidian has been found in levels of that date in the Franchthi cave on the Mainland (Cherry and Torrence 1982 p.24). Some eight Neolithic sites have been found on the island (Renfrew 1982 p.13) but Cherry and Torrence consider that there could have been as many as three dozen (Cherry and Torrence 1982 p.24). These were not permanent settlements (Wagstaff and Cherry 1982a p.136), but probably seasonal ones, used when the island was visited during fishing trips or to collect obsidian. That resource, unique in the Aegean, may explain why Melos has produced more Neolithic sites than the other Cycladic islands. (Cherry and Torrence 1982 p.24)

Permanent settlement seems to have coincided with the

beginning of the Early Bronze Age. The site density appears to have increased at least five-fold--much more than on any other island--and the settlements are located on or near good arable land (ibid p.34). Farming had already begun on the mainland, having spread from the Near East (ibid and J. Renfrew 1982 p.157) and the colonists simply brought their skills to bear on the local environment.

The settlements of the earliest EBA were scattered over the island. Each had a cemetery of cist graves attached (Wagstaff and Cherry 1982a p.137). They were all much the same size, and may represent single family farmsteads occupied for a long time (ibid p.138). The total population of the island has been estimated at around 120 (ibid), though this number had to increase if the island population was to survive, because it is estimated that a contact group of at least 175 is necessary to allow a viable gene pool (Gamble 1986 p.50). Phylakopi, though occupied, was not particularly important. Settlements were generally located on a small knoll, near the coast or a basin with good soil (Wagstaff and Cherry 1982a p.137). No imported artifacts are known, indicating a certain self-sufficiency, though it should be noted that all the characteristic features of this "Grotta-Pelos culture" pottery found on Melos can be found on other islands (Renfrew 1982c p.223).

Moving into the next period, covered by the "Keros-Syros culture", Melos began to increase its contacts with other

areas. Imported items have been found from elsewhere in the Cyclades and Crete (Renfrew 1982c p.223). The population increased to perhaps 270 (Wagstaff and Cherry 1982a p.138).

Towards the end of the EBA, in Phylakopi I, some changes can be seen, most obviously the beginning of nucleation of settlement. Phylakopi became a real "town", while other sites contracted and declined (ibid p.139). Interestingly, no imported objects have been found in Phylakopi I levels, and according to Renfrew the pottery is of a very Melian, rather than Cycladic, character (Renfrew 1982c p.223). The period ended with the destruction of Phylakopi I.

There is relatively little evidence available for the agriculture of this period. A granary model of Keros-Syros date indicates that grain was probably grown, and other Cycladic islands have produced evidence of vines, barley, olives, peas, chickpeas, lentils, coriander, anise and "Egyptian beans" (J. Renfrew 1982 p.156-7). Domesticated animal bones from Phylakopi include sheep, goat, cattle and pig, with the two former dominating (Gamble 1982 p.166). It is interesting to note that very few fish bones were found, despite Phylakopi's proximity to the coast and a very productive tunny run (Gamble nd p.127).

In the Middle Bronze Age the nucleating trend continued. The rebuilt settlement at Phylakopi appears to be the only one on the island (Renfrew 1982b p.38). The same trend has been noticed on other Cycladic islands at the same time

(Wagstaff and Cherry 1982a p.139). Phylakopi II saw contact with other areas increase. More imports were found, and Melian pottery (or its contents) began to be exported to the Cyclades, Mainland and Crete (Renfrew 1982c p.224). However, there is no question yet of any uniformity of culture across the area. The pottery of Phylakopi continued to be made in a completely local idiom (ibid p.223).

The agricultural practices also changed in the MBA. Now that the population was concentrated in one area, the emphasis may have shifted to more labour intensive but higher yield crops such as vines and olive trees, planted near the town to reduce the need for time-consuming travel (Gamble 1982 p.168). Actual plant remains found include wheat, barley and possible oats, grapes and a large seeded vetch (J. Renfrew 1982 p.156). The number of cattle bones discovered increases, indicating a greater use of the plough and improved transport possibilities (Gamble 1982 p.168). It has been suggested that nucleation of settlement allowed a greater area for running sheep (Wagstaff and Cherry 1982b p.258 and Gamble nd p.132).

Phylakopi II was destroyed and Phylakopi III rebuilt on the same alignment. For the first time, the town was fortified, and the "mansion" was built, in which the Linear A tablet was found. Phylakopi was now an "urban" centre, apparently run by some central authority (Renfrew 1982b p.40). It must be remembered, however, that Phylakopi II was built on a specific grid plan, indicating some

level of organisation even in the MBA. Also dating to Phylakopi III was the Pillar Room with its fresco paintings which may be an indication of an elite group. The use of frescoes and pillars is very reminiscent of Crete, and indeed the Cretan influence on many aspects of early Phylakopi III was very strong. Renfrew goes so far as to say that there was no local inspiration in the art of this period: it all derived from Crete (Renfrew 1982c p.225).

The same Minoan influence has been seen on other islands, leading to a fierce debate over the truth or otherwise of the "Minoan thalassocracy" during the second palace period. Much Cretan pottery has been found in the islands, as well as locally made imitations. A standard Minoan "kitchen kit" has been identified at sites on Crete, at purely Minoan sites such as Triandha on Rhodes and at Cycladic sites such as Phylakopi and Ayia Irini, which had their own ceramic traditions (Wiener 1990 p.135). Minoan type loomweights and potters wheels appear as well (ibid p. 139). On Thera much of the architecture is in the Minoan style, while sites such as Phylakopi and Ayia Irini, as well as smaller, non palatial sites on Crete, follow a pattern of one large building with Neopalatial features surrounded by smaller ordinary structures (ibid p.134). The Cretan style "mansion" at Phylakopi is of course where the Linear A tablet was found. Features such as fortifications and drains, which require communal planning are also seen as Minoan inspired, though it is of course impossible to tell whether the locals simply copied the ideas or imported Minoan architects, or whether there was an actual

imposition from Crete (ibid p.140). The frescoes seen especially at Akrotiri but also at Phylakopi and Ayia Irini are regarded with special interest, because of all the palatial sites on Crete itself, only Knossos has produced frescoes. This may indicate some special status for the island sites (ibid p.143).

All of these features do point to a very strong relationship between Crete and the Cyclades during LCI, but the nature of that relationship is still unresolved. According to Davis, the main impetus came from exchange, especially of metal; hence the especially strong connection between Crete and the islands of the "Western string", leading to the lead and silver mines of E. Attica (Davis 1992 p.706). Wiener takes a more political view. He suggests that it was only in LCI that the Minoans could bring together enough power, population, weapons and ships to fuel their great expansion, which may have been occasioned by threats to the trade routes or the rise of Mycenae (Wiener 1990 p.151)

Despite the obvious importance of Minoan culture in LCI, we must bear in mind that it varies greatly from area to area. The S Aegean was most heavily influenced (Davis 1992 p.705) but even within that area there are differences. The architecture and settlement patterns of Thera, for example, are much more Minoanized than those on Melos or Kea (ibid p.706), while the frescoes, though using some Cretan iconography, are painted in a local style (Wiener

To return to Phylakopi, the evidence is less overwhelming. Wiener has suggested that the Minoans actually fortified the site (p.151) as well as possibly constructing the drainage system (p.140). However, City III so closely followed the pattern of City II that it seems most likely that they were constructed by the same local group, who could also have decided independently to fortify and even drain the town. Imitation or even import need not necessarily imply foreign takeover. American government buildings very deliberately copied Greek and Roman prototypes, for purely cultural and psychological reasons, and the amount of Coca-Cola consumed in China in no way points to any American influence on their government. There can be no question of the great popularity of Minoan pottery, though as we shall see (p.101) there is evidence that the pottery industry itself was not greatly changed. The appearance of Cretan loomweights, potters' wheels and "kitchen kit" may indicate a deeper Minoan involvement in the Cyclades, since their adoption would involve some economic and technological changes. Wiener remarks that women don't casually change the way they cook and weave, so the appearance of the new techniques must indicate new settlers or a new government directive (p.139). There is some truth in this, though it is also the case that women or men will usually happily accept a new technology if it makes their work quicker, easier or more profitable.

We return to the question of the actual relationship

between Crete and the Cyclades and more specifically Phylakopi. Three possible connections have been suggested: 1. It was conquered by Crete, 2. It was autonomous but strongly influenced and 3. It was an actual Minoan colony, which could either mean actual settlers or the imposition of a Minoan administration on the native population. Unfortunately, the effect of each of these scenarios on the archaeological record is the same, so that on present evidence we cannot say definitively that one is correct. On balance I dislike the idea of a full Minoan conquest, which should have produced more signs of disruption, and was probably an unnecessary use of Cretan resources. We will see (p.95-6) that there was a concentration of potters' marks in trench piC, the area of the mansion, which pre-date that structure. This may indicate some form of centralised administration before the coming of the Minoans. However, in view of the appearance of Linear A and some other administrative features, it seems likely that at least some Minoan officials were actually in place at Phylakopi.

Few Melian exports have been found from this period. It has been suggested that they were perhaps perishable items such as barley, wine or wool, produced for the dominant Minoans to export (Renfrew 1982c p.225-6), though it is difficult to see how the items available for export could have changed so dramatically from the previous period, when identifiable Melian exports of pottery were relatively common, or why the Minoans would suppress a presumably

successful trade in the pottery or its contents. One possibility is that Minoan control over the Aegean was such that all workshops were producing the same style of pottery--it is known that some LMIB Marine Style vessels were made on the Mainland (Renfrew 1982c p.226). This would of course only produce a stylistic similarity, as Melian fabrics are very different from Cretan. Perhaps the Minoans had no interest in ceramics which only imitated their own.

The agricultural products of the LBA were cereals, pulses and orchard crops, much the same as the Mainland (J.Renfrew 1982 p.159). The incidence of cattle continued to increase (Gamble 1982 p.168).

In mid and late LHIII changes came about at Phylakopi as indeed they did elsewhere in the Aegean. First, the "mansion" was destroyed and the Mycenaean type megaron built on the same spot. Slightly later the shrine was built and the fortifications strengthened. The pottery of this period was very similar all over the Aegean. That from Phylakopi looks imported, but it is possible that new technology led to an improvement in local wares (Renfrew 1982c p.227). Once again, and possibly for the same reasons outlined above, no Melian exports are known (ibid). On the other hand, quite a bit of material was imported, most notably the Lady of Phylakopi and some sealstones from Crete and the Mainland, all found in the shrine, as well as more exotic items such as two bronze "smiting god" figurines (ibid). Clearly the shrine at Phylakopi was an

important religious centre. It need not be assumed, however, that special trips were made to visit the shrine, as the constant flow of traffic around the Aegean presumably supplied a body of foreigners to make offerings, though there must have been some similarity of religion to draw outsiders to a Melian sacred place. Alternatively, the offerings could have been brought by local inhabitants returning from voyages abroad.

It has been suggested that some cult buildings of the LBA were modelled after Canaanite prototypes (Negbi 1988), and indeed that the E shrine at Phylakopi was specifically reserved for a foreign cult, and used by Canaanite sailors (ibid p.357). However, Gilmour (1993) refutes this. He suggests that the architectural similarities are mostly coincidental, and that the Reshef figurines (found in an area used as a dump for both shrines) were probably offerings of thanks for a safe voyage (ibid p.134). The importation of gods from other cultures was fairly common in historic Greece, and presumably the practice was also found during the Bronze Age. I doubt whether the Canaanite community was so powerful a force in Phylakopi that it required its own place of worship. Gilmour's explanation seems more likely.

For perhaps the first time in several hundred years there were settlements elsewhere on the island (Renfrew 1982b p.42). Perhaps coincidentally, it is at this time that the number of cattle bones declines. This may be a result of

the introduction of the donkey, a much more useful animal when it comes to transport--making other parts of the island more accessible--though cattle continued to be used for ploughing (Gamble 1982 p.168).

Towards the end of Phylakopi III, in LHIII B2, the Mycenaean control of the Aegean began to falter and decay. As Melos became more isolated, the pottery style naturally became more local (Renfrew 1982c p.227) At the end of LCIII, around 1090 BC, with the collapse of the Mycenaean world, Phylakopi and indeed all of Melos was virtually abandoned for some 200 years. The same can be said for much of the Aegean. When the island was re-colonised by the Dorians, their capital was at Ancient Melos, further W (Renfrew 1982b pp.43,46). The site of Phylakopi was never settled again.

Two particularly interesting facts emerge from this history of Bronze Age Melos. First, that the island was more important than its neighbours from an early date; and secondly, that Phylakopi became not only the dominant but, for some time, the only settlement on the island. The questions of why and how these states of affairs came about are extremely complicated, and although numerous theories have been advanced, no totally satisfactory answers have yet emerged. As simply as possible, the various arguments are set out below.

There are two obvious reasons why Melos should become of more importance than other islands: either it provided

some unique natural resource(s) or it was a convenient stopping point on some important trade route(s). Melos' most famous natural resource , of course, is obsidian, and, as we have already seen, that was being exploited from a very early date indeed. (In fact, only one other Mediterranean island, Corsica, shows any evidence of pre-Neolithic human activity (Cherry and Torrence 1982 p.33).) Presumably the first visitors to Melos were fishermen (Torrence 1982 p.220), but once the great usefulness of obsidian became known it is possible that more specific trips were made to collect it. Later in the Bronze Age the use of obsidian may have declined with the spread of metal working, but Melos had other products to offer, such as millstones (Renfrew 1982c p.222) or pumice and sulphur, which were certainly exported in Classical times (Sparkes 1982 p.45). Even today Melos supports quite a large industry quarrying various minerals.

As to the second point, it has been argued that Melos was a key point on the trading route between mainland Greece and Crete along the so-called "Western string." As evidence for this route, Cherry and Davis have pointed out a preponderance of LHI pottery found at Ayia Irini, Phylakopi and Akrotiri, but not elsewhere in the Cyclades (Cherry and Davis 1982 p.333). The amount of mainland material is greatest on Kea and decreases as you move away E and S (ibid p.337), indicating a directional down-the-line movement, perhaps involving the movement of metals from Attica (see above p.33). Melos may also have been involved

	Phylakopi sequence	Barber and MacGillivray	Rutter
2900			
2800		ECI	
	A1		
2700			ECIIA
2600		-----	
2500	A2		
		ECII	-----
2400			ECIIB

2300	-----	-----	
			ECIII
2200		ECIIIA	
	Iii		-----
2100		-----	
	B		MCI
2000			
	Iiii	ECIIB	-----
1900			
			MCII
1800	-----	-----	
	IIii		-----
1700	C	MC	MCIII

1600	IIiii		LCI
	-----	-----	
1500	D IIIi,ii	LCI, LCII	-----
	-----	-----	
1400			
	E		
1300	IIIIii	LHIII	
1200	F		
1100	-----	-----	
1000			

4. ECII/III nomenclatures

in a route reaching from the Peloponnese to Anatolia (Wagstaff and Cherry 1982b p.248). Of course, future excavations may radically alter this picture, bringing other islands into more prominence. However, it seems obvious that a site like Phylakopi would be in the mainstream of Aegean communications, and the great influx of first Minoan and then Mycenaean culture seems to bear this out.

Far more perplexing than Melos' role is that of Phylakopi itself. To understand--if indeed it is possible to do so--how and why it became so pre-eminent, we must first consider how and why a settlement came about in that particular location.

The primary reason for the location of any human habitation is survival: a place must be chosen that is safe and capable of producing food to support the population. Melos' first colonists were farmers, and hence the EBA sites are scattered over the island wherever there are pockets of good land, including Phylakopi, which also had the inestimable advantage of a good water source (Torrence 1982 p.221). The pottery styles indicate some contact with other islands, but by and large the picture is of small, self-sufficient farmsteads with only minimal contact with the outside.

Towards the end of the EBA, however, something changed. From being just one of a number of small sites, Phylakopi grew into a town, and settlements on the rest of the island declined. For the rest of the Bronze Age Phylakopi would be the dominant, and for a good part of that time

the only, permanently inhabited site on the island. Two obvious questions immediately spring to mind: why did this shift in settlement pattern take place, and why did Phylakopi survive and expand, rather than any other EBA site?

To begin with, this was not an isolated occurrence. Nucleation of settlement can be seen on some other Cycladic islands (Wagstaff and Cherry 1982a p.139), though on Kea Ayia Irini seems to have dominated the island throughout the Bronze Age (Cherry, Davis and Mantzourani 1991 p.226) and on Thera the settlement pattern was closer to that on Crete, with a variety of rural sites co-existing with Akrotiri (Davis and Cherry 1991 p.192). The main focus of EBA life was agricultural, so it is natural to look there for some explanation of the change. Unfortunately, this appears to be a futile exercise, because there is no evidence of a great change in agricultural practices at this time (Gamble nd p.128). The next possibility is that an external force, probably social or political in nature, was at work. It has long been recognised that some upheaval took place in Anatolia and Greece near the end of the EBA (Mellaart 1958 p.9). In the Cyclades, new Anatolian forms began to appear (Macgillivray 1984 p.70), and at the end of the period there was "turmoil" (ibid p.75) and disruption (Barber 1984 p.88). There was some indication of cultural change, such as the appearance of chambered tombs and the re-appearance of intramural infant burials (Rutter 1984 p.101). Based on correlations with mainland material, some scholars suggest that there was a "gap"

during ECIII in the Cyclades: a period for which material of Cycladic origin has been found on the mainland but not in the islands themselves (ibid p.96). This has led to the development of a controversy both over late EC history and its nomenclature. As this is important to the study of Phylakopi, I will digress to consider the problem. (See Figure 4)

There are two main lines of argument. No one seems to dispute the continuity from ECI (Phylakopi A1) to ECII (Phylakopi A2 and Ayia Irini II). Rutter has changed "ECII" to "ECIIA" (Rutter 1984 p.95), for reasons to be considered below. Some confusion sets in in the next period. No material for this phase has been found at Phylakopi (Barber 1984 p.88), but at Ayia Irini the stratification continued undisrupted from period II to III (Rutter 1984 p.95). It appears to have been a period of great change. Many new types of pottery and bronze objects appeared (Barber and Macgillivray 1980 p.155). Some of the pottery appears to have been inspired by Anatolian types (Macgillivray 1984 pp.70 and 74). The international contacts seen in the previous period began to break down (Rutter 1984 p.102, Macgillivray 1984 p.73). Towards the end of the period many settlements were abandoned (Rutter 1984 p.101, Barber and Macgillivray 1980 p.151). Because of the clear continuity between Ayia Irini II and III, Rutter has now called the period ECIIIB, and equates it with the latest EHII (Rutter 1980 p.70). Because of the great cultural changes and the gap in material at Phylakopi, Barber and Macgillivray have preferred to call it

ECIIIA, and associate it with late EHII and early EHIII (Macgillivray 1984 p.73).

The next period, in the Barber and Macgillivray system, is ECIIIB. This is covered by Phylakopi Iii/iii, but there was a gap in occupation at Ayia Irini. No stratigraphic connection between this period and IIIA has yet been found, but some evidence of continuity can be seen, particularly in the pottery styles (Barber 1983 p.80). Two types of pottery decoration have been found at Phylakopi in Iii: incised and painted geometric. The incised has some local history, though it also has parallels on the mainland (Barber and Macgillivray 1980 p.152). Incised ware disappeared in Iiii, but geometric decoration continued (ibid p.151). Contact with Crete was renewed, with Melian pottery found in MMIA contexts at Knossos (Macgillivray 1984 p.74).

After Rutter's period ECIIIB, he postulates a "gap", a period of 100-150 years between the artifact assemblages of ECIIIB (Barber ECIIIA) and MCI (Barber ECIIIB) (Rutter 1984 p.96). This gap occupies most of the EHIII period, and he adduces a number of Cycladic pieces from EHIII contexts which have characteristics of ECIIIA,IIIB or both (ibid p.101). He assumes these pieces came from the period of the gap, so obviously some islands were occupied at the time (ibid). There are other changes visible: many small settlements were abandoned at the end of ECIIIB, and towards the end of the "gap" they were replaced by a few larger sites such as Phylakopi and Paroikia (ibid). New

grave types appear, including the re-appearance of intramural infant jar burials. Interestingly, the fairly large lead and silver mining activity on Siphnos declined or stopped altogether at around this time (ibid).

Rutter's next period is MCI, equivalent to Barber's ECIIIB, MMIA and the earliest MH. He sees a new internationalism arising (ibid p.103--but note Rutter 1980 p.72-73 where he says that there was little Minoan material found in the islands in MMIA). He does not give an equivalence with Ayia Irini.

It is worth mentioning here that Overbeck and Overbeck also suggest that the material from Phylakopi I ii/iii, because it can be correlated with very early MHI and MMI, should be called MC rather than EC (Overbeck and Overbeck nd p.114).

Barber briefly suggests a gap at the end of his period ECIIIB at Phylakopi, because the most characteristic pottery fabrics of the following period, Cycladic White and Dark Burnished, appear more or less fully formed without any preliminary stages, whereas at Ayia Irini there seems to be a natural development (Barber 1983 p.78). In fact, an early form of Cycladic White was found in phase A2 levels (Renfrew and Evans, forthcoming p.18). However, given that the entire site seems to have been destroyed, it is possible that there was a pause before Phylakopi was rebuilt, during which Cycladic White and Dark Burnished developed elsewhere. Both fabrics were

taken on by the Melian potters with tremendous enthusiasm: perhaps they concentrated on them while the potters of Ayia Irini moved on to other ideas.

This is clearly a very confusing issue and one which is not capable, in our present state of knowledge, of being resolved. However, it is necessary to take an explicit stand one way or the other, simply in order to be able to continue a discussion of E and MC material.

To begin with the problem of the "gap". Rutter himself lists artifacts belonging to that period of time, and admits that some islands must have been occupied. Clearly, therefore, there is not really a gap in Cycladic history, any more than the Dark Ages were entirely "dark." There is no question but that our knowledge of the period is confused and fragmentary, or that life in the Cyclades was disrupted in some way (cf. Barber 1983 p.79-80), but the term "gap" is not really appropriate, and simply confuses an already cloudy issue.

Manning, bringing together the stylistic, relative and absolute chronologies, has succeeded in mostly eliminating the gap, adducing evidence from several sites (including the recent work at Palamari on Skyros) to show an overlapping progression from Keros/Syros through Lefkandi I, Amorgos and Phylakopi I styles (Manning 1995 pp.66-70). He also makes a salutary observation about the difficulties of this sort of exercise: trying to equate culture based

chronologies, generally linked to one type site (such as Lefkandi I), with the broader relative chronologies (ECI,II,III). For example, Lefkandi I is followed by EHIII, but late Kastrì pottery, which is equated with Lefkandi I, also extends into EHIII.

This brings us to the second problem, that of nomenclature. Rutter insists that labels such as "ECII" should designate a period of time, not a group of artifacts (Rutter 1983 p.74). But "ECII" is not a specifically chronological designation, as "the 20th century" or even "the XVIIIth Dynasty" are. It refers to the period during which certain artifacts, certain burial types, certain settlements were in use. Prehistoric archaeologists, unless they stick to rigidly numerical designations such as "2300-2000BC" (which is usually impossible), are forced to divide their subjects according to obvious changes in the physical remains, and name them, based on stratigraphy, in relation to one another. Given associations with historical cultures which can be tied to specific dates, the prehistoric material can then be located in an absolute chronology.

Divisions must be named in relation to one another, but how? Within an historical context we can speak of "the Tudor age" or "the Enlightenment", but we have no such tags in prehistory. The tripartite system of Early, Middle and Late is the most instinctively satisfactory, because any event must be either close to one end or close to the middle. The tendency is to then subdivide each into I,II

and III, for the same reasons. The subdivision can be continued virtually ad infinitum, wherever changes in the archaeological record justify it.

In the case of the Cyclades, the sequence was originally set from the evidence of Phylakopi. It was the first major excavation in the islands, it produced an excellent sequence covering the whole of the Bronze Age, and it was fortuitously divided into three parts by two very major destructions. The obvious course was to equate City I with EC, City II with MC and City III with LC. Assuming that one can speak of the Bronze Age Cyclades as a unit in this fashion (which appears to be undisputed, with due allowance for local variation), it is then possible to fit any other Cycladic findings into that sequence. The argument has arisen that, to bring the Cyclades into line with the Mainland and Crete, the period covering the last phase of Phylakopi I should be named "MC". However, if one accepts the continuity through Barber's period III, the undoubted fact of the destruction of Phylakopi I, the rebuilding of it as Phylakopi II, and the re-occupation of Ayia Irini at about the same time, it seems that the original nomenclature makes more sense, and that the end of Phylakopi I is the end of the EC. In that case, the period of Rutter's "gap" becomes absorbed into Barber's ECIIIA: one of the events covered by that name.

As for the placement of the change from ECII to III, the appearance of so many innovations and the changed interna-

tional relations after Phylakopi II incline me to Barber's system. In any case, on the most pragmatic level, Barber retains with only minor modifications the designations which have been in use for nearly a century ; to discard them now would merely prove vastly confusing.

Finally, the urge to bring the Cyclades into line with their neighbours appears to me to be misguided. Despite the strong ties between the three areas, it is accepted practice to consider them as three separate entities, and there is no reason why their development should proceed simultaneously. To take the picture to its extreme, consider the fact that Britain's Bronze Age began some 1000 years later than the Aegean's. It is best, when dealing with these relative divisions, to concentrate only on the area in question. For that reason, and those outlined above, I will throughout this paper use the system proposed by Barber and Macgillivray.

To return to the main discussion: there was disruption towards the end of the EC, some sites were abandoned, and the pattern changed to single nucleated settlements. Perhaps this was seen as a safer way of life--though few if any of the sites were fortified. Perhaps it was more convenient, in view of the resurgence of overseas contact. The increasing political sophistication may have encouraged such a trend--or vice versa. Several scholars have developed hypotheses of an elite group using political power (perhaps mingled with religious) to manipulate production in different areas: once a group concentrates

its efforts on supplying a surplus of some product for use in exchange, they become dependent on a redistributive centre to make up the resultant shortfall in subsistence production. The political and exchange centre would then develop a gravitational pull as more workers were needed to keep it running. Increasing contact with more centralised and sophisticated cultures may have fuelled the tendency. It may be that if our picture of the EC were more fine grained we could observe a movement of nucleation from one area to the next, starting from the Mainland or Crete or Anatolia.

These theories may explain the change in settlement pattern in general, but there still remains the question of why Phylakopi reached such a pre-eminent position. Its situation was fairly good, with a fine harbour, but it is plagued by the meltemi wind in summer, making it hard to leave (Wagstaff and Cherry 1982b p.258). It is not as close to a large area of good soil as some other sites (ibid p.258). Torrence's analysis of the evidence from the obsidian quarries seems to indicate that Phylakopi did not have direct control of trade in this resource. Her arguments are based on the reconstruction of the quarrying and production activities as shown by the archaeological evidence. This picture is then compared to patterns predicted for commercial marketing (Torrence 1982 p. 220 and Wagstaff and Gamble 1982 p.100). It did, however, have one of the best water sources on the island (Torrence 1982 p.221)--a prime consideration. It is worth remembering

that Phylakopi has never again been settled, so presumably there is nothing inherently advantageous about the site, though of course there have been changes such as the silting of the harbour.

A tremendous amount has been written addressing this question: I have only included the main points here. At this point, however, I think it important to suggest that one must bear in mind--as few archaeologists seem to do--the great extent to which accident, expedience, laziness, lack of imagination and sheer stupidity enter into human endeavour. A rather frivolous and entirely fictional comment gives a modern illustration of this fact:

"If this country (the East Anglian fens) had been drained intelligently and all of a piece,...by running all the canals into the rivers instead of the rivers into the canals, so as to get a good scour of water...the landscape would look rather less like a crazy quilt. But what with seven hundred years of greed and graft and laziness, and perpetual quarrelling between one parish and the next, and the mistaken impression that what suits Holland must suit the Fens, the thing's a mess. It answers the purpose, but it might have been a lot better" (Sayers 1982 p.155).

If a situation is completely non-viable, clearly it will not continue. But as long as it does well enough, sheer inertia is likely to keep it going. Consider the fact that, after the destruction of Phylakopi I, the city fathers did not take advantage of the moment to move their "capital" to a more central spot, or one commanding better land. They simply rebuilt in a more organised and up-to-date fashion. It seems likely that Phylakopi just "happened", for no explicit reason. In all probability, the reason for its meteoric rise came from men. One man, or a group of them, had enough influence and ambition to take

advantage of the changes they saw around them and concentrate power at Phylakopi, and once established, the power base stayed at Phylakopi until its final destruction, though the LBA saw more settlements elsewhere.

In Phylakopi, then, we have a settlement spanning the whole of the Bronze Age, which reflected historical developments around the Cyclades but maintained its own identity. It grew to be a place of some importance, part of one or more exchange networks which saw it trading goods with both Crete and the Mainland. Throughout its history, with the possible exception of the Mycenaean period, Phylakopi had a healthy and prolific pottery industry, whose products give us a great deal of information about the history of the site and its external contacts. Having outlined the history of Phylakopi, let us now consider the pottery sequence in more detail.

SECTION II: THE POTTERY SEQUENCE

For the final report on the 1896-9 Phylakopi excavations, Edgar discussed the pottery in roughly chronological order, with a different section for each ware. Some small groups were dealt with rather summarily at the end of the discussion. Dawkins and Droop's report added some information, and the material from their excavation was re-examined by Barber (BSA 69) and analysed much more fully. Further detail and some changes in the sequence were added on the evaluation of material from the 1974-77 excavations. For the sake of simplicity I will discuss the wares in more or less the order in which they were listed in the original report, explaining any changes in dating etc. that have come about since. This is followed by a brief consideration of imported pottery and imitations of foreign wares. The discussion of each type of pottery has associated with it a series of figures illustrating some of the different shapes and modes of decoration used in that fabric. Descriptions of vessel shapes within the text are kept to a minimum. At the end of this section is a brief summary of our current chronological picture of Phylakopi pottery (p.81-82 and fig. 12).

PHASE A1 AND A2 WARES (Figure 5)

The earliest pottery at Phylakopi, of the "pre-city" period, was found in some abundance in the lowest half-meter of the trial trench dug to establish the pottery sequence, though it was very fragmentary (Atkinson et. al. 1904 p.83). It was handmade, very coarse, but well burnished, usually red or brown (ibid). Some pieces had

simple incised decoration, occasionally filled with white (ibid p.87). Several pieces allowed shapes to be reconstructed: jars with lug handles, shallow plates, cylindrical pyxides and various open vessels (Atkinson et. al. 1904 p.83-84). The excavators were interested to note that this pottery was very similar to that found in cist tombs at Pelos and elsewhere in the Cyclades, but here it was found in the settlement (ibid p.85)

Later excavations added little to the picture of this ECI pottery, now called "Heavy Burnished", though it becomes clear that a very characteristic feature is the thickened or rolled rim (Evans and Renfrew 1984 p.64). This is Renfrew's phase A1 at Phylakopi; in more general Cycladic terms the Grotta-Pelos culture. One interesting feature noticed by Evans and Renfrew is that the Phylakopi A1 pottery does not include the same incised types as the Pelos cemetery. This could either be a functional difference--different vessels or decoration were used for funerary purposes--or simply a chronological one, with the period of that type of incision not represented at the settlement. Evans and Renfrew are inclined to the former suggestion, though without supplying any evidence. (ibid p.67).

The most common fabric in A1 levels is Coarse Thin ware, found in a number of shapes including deep bowls and (probably) hole mouth jars. There was also a thick coarse ware which was less common (Renfrew and Evans forthcoming

p.6). There were two other fabrics found, though they were rare: Burnished (Red), similar to Heavy Burnished but with a very even, clear red finish, and Soapy, which became more common later (ibid).

The original excavation yielded several other pre-city wares, which appear to overlap chronologically with the Heavy Burnished pottery but continue longer than it. These later wares were found over a wider area of the site than their predecessor, but still in a very fragmentary condition, so that only a few characteristic features could be remarked upon (Atkinson et. al. 1904 p.85).

These were large coarse vessels with simple impressed decoration, some handles had an incised or slashed rope pattern. Similar wares were found on Paros and Amorgos--interestingly from a cemetery site (ibid p.86). Another, finer ware was covered with a thin "glaze." It was used for smaller shapes: bowls or saucers, deeper bowls or cups, pyxides. Some pieces may have come from the neighbouring tombs (ibid). The same fabric is used for the first painted ware. Some pieces were glazed inside. The decoration consisted of simple geometric designs in lustrous paint (ibid).

These miscellaneous wares were recognised as being contemporary with pottery from the later cist tombs and some other settlements such as Chalandriani on Syros. Edgar felt that the majority of it was imported (ibid). He thought that the glazed ware was a forerunner of Kamares

and may have been imported from Crete (ibid p.87).

Renfrew's excavation allowed more detail to be added to this picture. The period in question has become known as ECII or the Keros-Syros culture; Phylakopi A2. The dark glazed ware has acquired the German name of its mainland counterpart, "Urfirnis" (Evans and Renfrew 1984 p.66). It has now been established as the most common import in this phase, though is unclear from where (Renfrew and Evans forthcoming p. 14). New shapes were identified, including the jug and sauceboat (Barber 1987 p.92)--another feature linking this fabric with the Mainland, rather than Crete as had been previously thought. A similar, probably local fabric has been named "Urfirnis related". It is a fine, hard buff ware, with a dark wash or slip. It is distinguished from true Urfirnis by the unevenness of the finish and the fact that the pieces don't "clink" when struck (Renfrew and Evans forthcoming p.14-15).

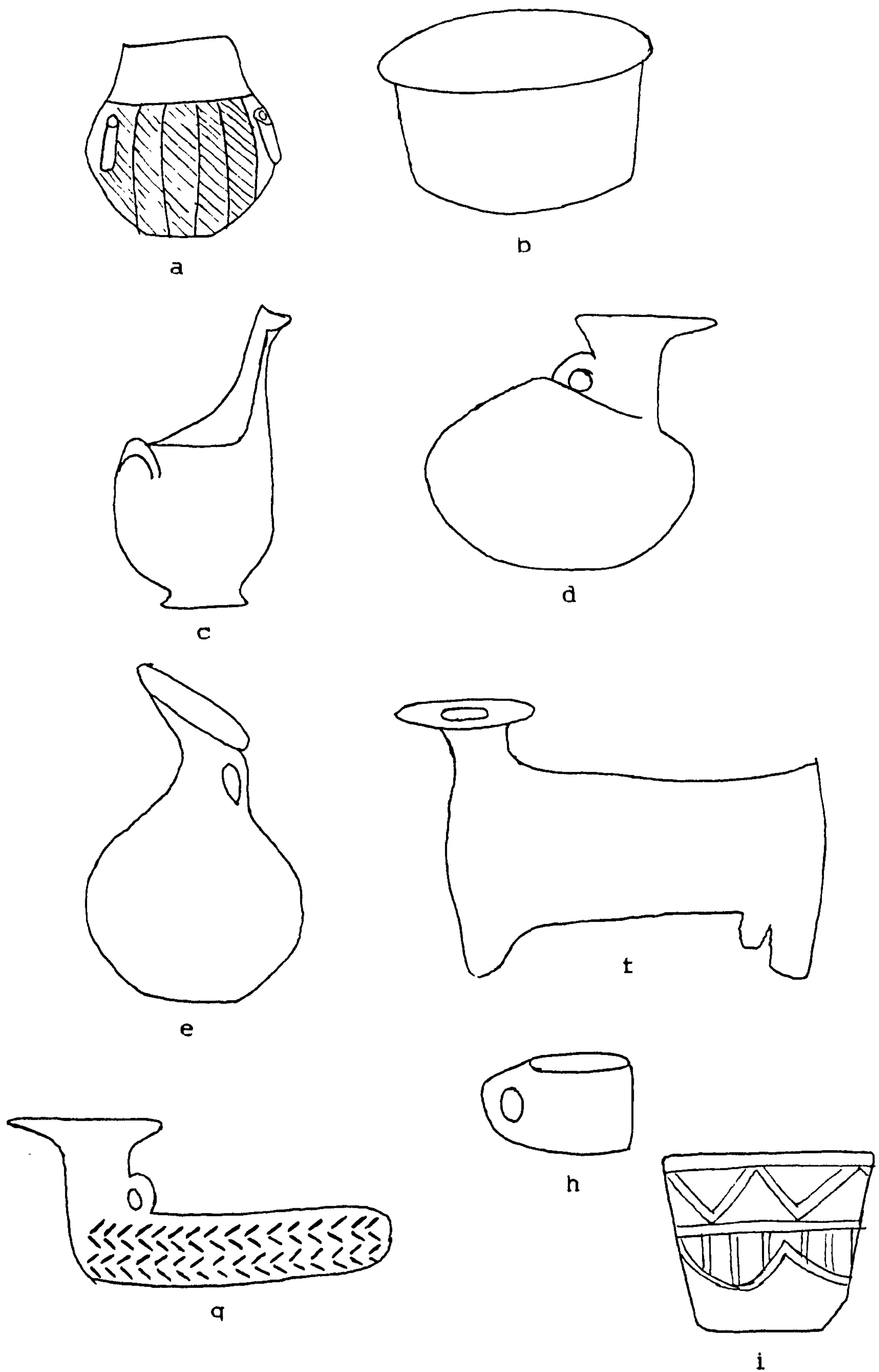
Some pieces, including the famous Cycladic "frying pans", have stamped and incised decoration, and a thick "soapy" ware was also incised (Evans and Renfrew 1984 p.66). This may be the same as Edgar's thick coarse ware mentioned above, but it is impossible to tell from the meagre descriptions given. Both these wares are imports, probably from elsewhere in the Cyclades; Soapy ware may come from Siphnos (Renfrew and Evans forthcoming pp.10 and 13), though no appropriate source of clay has yet been discovered (Vaughan and Wilson 1993 p.180).

Renfrew subdivided the painted ware into four different types: repeated pattern (this is the same as the painted ware mentioned in the original report (Renfrew and Evans forthcoming p.18)), broad streak, thin line and free hand. The last type became much more common in phase B. It is also known as Early Matt Painted (Renfrew and Evans forthcoming p.12). He also identified a new type, called "pale coloured", which can be white all through, buff smoothed or "other". This pale ware continued into the next phase (Evans and Renfrew 1984 p.65). It is assumed to be a local product. The forms are somewhat related to Heavy Burnished (Renfrew and Evans forthcoming p.15).

Once again, Coarse Thin ware was the most common fabric, in shapes ranging from open bowl to pithos (Renfrew and Evans forthcoming p.16). Coarse Thick also continued (ibid).

Heavy Burnished was still made, but on a much reduced scale. Its place seems to have been taken by Urfirnis Related and Early Dark Washed, a rather more coarse, locally made product (ibid pp.8,17).

Other A2 fabrics include the very first examples of Cycladic White, though they are not yet painted, Burnished Fugitive Slip, which is similar to Stamped and Incised, and one sherd each of Chalky Slip and "other incised" (ibid p.18).



5. Phase A and B Pottery: a) jar with lug handles, b) cylindrical bowl, c) saucer-shaped, d) duck vase, e) beaked jug, f) animal vase, g) ring vase with incised decoration, h) cup, i) cup with incised decoration

The change from A1 to A2 is marked by the increase in imported fabrics and their subsequent local imitation. The first locally made decorated fabrics are Broad Streak and Thin Line. None of the incised ware seems to be of local origin (ibid p.19).

PHASE B (Figures 5 and 6)

The confusions associated with the ECIII period have already been discussed (pp.43-49) and naturally they include some problems with the pottery of the period. It therefore seems sensible to give a brief explanation of our current understanding of ECIII, both at Phylakopi and in the Cyclades as a whole, before going on to discuss the individual fabrics.

The stratification of Phylakopi is as follows: Pre-City (A1 or ECI) levels, followed by Ii deposits (A2) with very few structural remains. The finds are of ECII type. The ECIII period is covered by Renfrew's phase B: city Iii floors followed by Iiii floors which in turn were sealed by the general destruction of the first city (Barber 1984 p.89).

In Cycladic terms, ECIII is divided into A and B. The pottery of ECIIIA is noted for the introduction of new shapes with Anatolian ancestors: tankard, bell cup, the famous depas amphikypellon, straight sided plate and a type of askos called a duck vase, though this is rare (Barber 1987 p.93) At the same time, some shapes survived from the previous period, such as the saucer, spherical

pyxis and jug (ibid p.94). The fabric is finely burnished, sometimes incised and white filled. Occasional painted pieces have been found, but they are rare and only one shape is known, the pedestalled cup. It is new to this period but not, apparently, one of the Anatolian immigrants (ibid). If its unique position is not a fluke of preservation or recognition, it may indicate that the ware and/or shape originally had some special significance.

On Melos, however, there has been only extremely small amounts of typical ECIIIA pottery found (Barber 1984 p.94 n.1). The pottery discovered immediately above the ECII levels is of a type now assigned to ECIIIB: a refinement of the earlier heavy burnished ware, known as Early Dark Faced ware, still sometimes incised and white filled. there was also a type named by Edgar "Painted Ware of the Geometric Period". It has both rectilinear and curvilinear motifs (Barber 1987 p.96). In the latter part of the period, Iiii, the dark faced ware disappears but painted continues (Barber 1984 p.89). Some shapes seem to have come from IIIA, such as the duck vase and beaked jug, but others are new (Barber 1987 p.94. see below p.57 for a description).

The problem of the apparent gap in the Phylakopi sequence is a complicated one and has been discussed above. There is no apparent physical or stratigraphic evidence of any period of abandonment at the time (Barber pers.comm.), and Barber (1984) has demonstrated some definite connections

between the Early Dark Faced pottery and that of both ECII and ECIIIA, and it may be that the Anatolian style pottery of IIIA was simply not used at Phylakopi. In any case, from the point of view of our Phylakopi pottery sequence, ECIIIA can be virtually ignored.

EARLY DARK FACED

To return to the Phylakopi sequence: with the building of City I, the heavy burnished ware developed into a finer type called "Early Dark Faced." It is now called "Phylakopi I Incised", though some pieces which are not incised could be confused with Urfirnis or Urfirnis Related (Renfrew and Evans forthcoming p.20). It is no longer burnished, but has a lustrous dark coating (Atkinson et. al. p.87). It is made of the same clay as the painted geometric ware described below and was therefore considered to be a local product (ibid). Like its predecessor, this fabric was sometimes decorated with incised designs, some of which were filled with white paste to make them more visible (ibid).

The shapes found in the first excavation included cylindrical pyxides, animal and ring vases (these were not known elsewhere in the Cyclades), beaked jugs, jugs with pinched mouths, the ubiquitous cups, and a type of askos called a "duck vase" (ibid pp.87-88). This shape, as well as some others, was immediately noted for its similarity to vessels from Hissarlik (ibid p.92). Barber adds the spouted jar (Barber 1984 p.92).

PAINTED GEOMETRIC (figure 6)

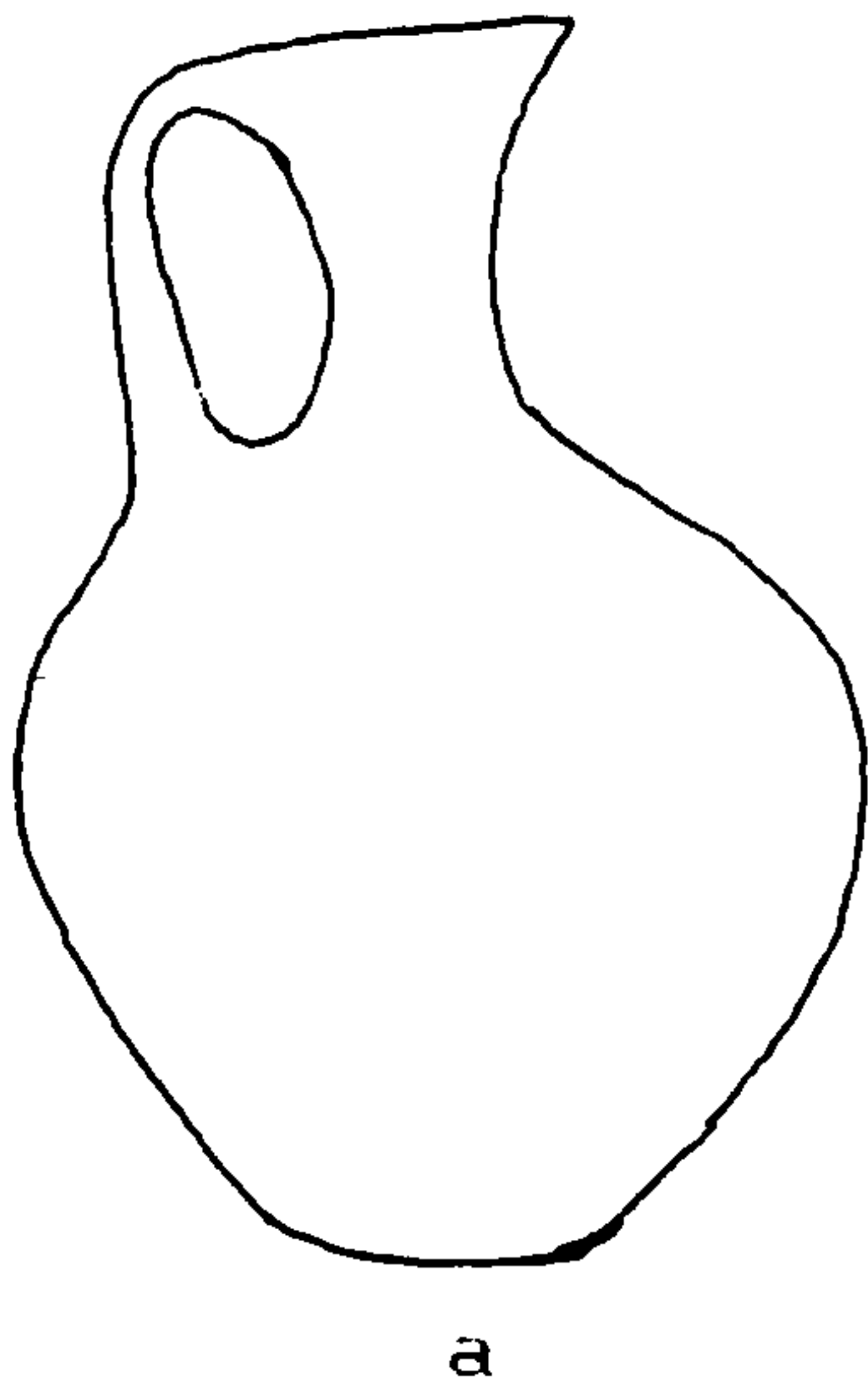
The second major fabric of this period is painted ware, named by Edgar "Painted Ware of the Geometric Period". Three types were found: lustrous dark paint on light ground, matt dark paint on light ground and white paint on lustrous dark ground (Atkinson et. al. 1904 p.93). Although all came to be used simultaneously, it is the first type which appeared earliest (ibid). All three types have some features in common: the use of flat bases, as opposed to the ring bases used later, handles with one or both ends stuck through the side of the vessel (another Anatolian feature (Barber 1987 p.95)), and the continued use of suspension handles (Atkinson et.al. 1904 p.94). Another feature that is very important from the point of view of this work is that many of the geometric painted vessels bear potters' marks (ibid).

The lustrous dark on light decoration was applied onto a light slip: only the zones with decoration were slipped (ibid p.96). The motifs were simple, linear or geometric. The fabric was used for a number of shapes: several types of pithoi, amphorae and storage vessels, globular and collar necked jars, beaked jugs with spreading or pinched spouts, round mouthed jugs, handleless and handled cups, kernoi--more common in the tombs--and pyxides (ibid p.96-102). Over the years it has become possible to refine this picture somewhat. New shapes have been added to the catalogue: the barrel jar, various cups and the spouted "Melian" bowl (Barber 1987 p.95 and see below p.81).

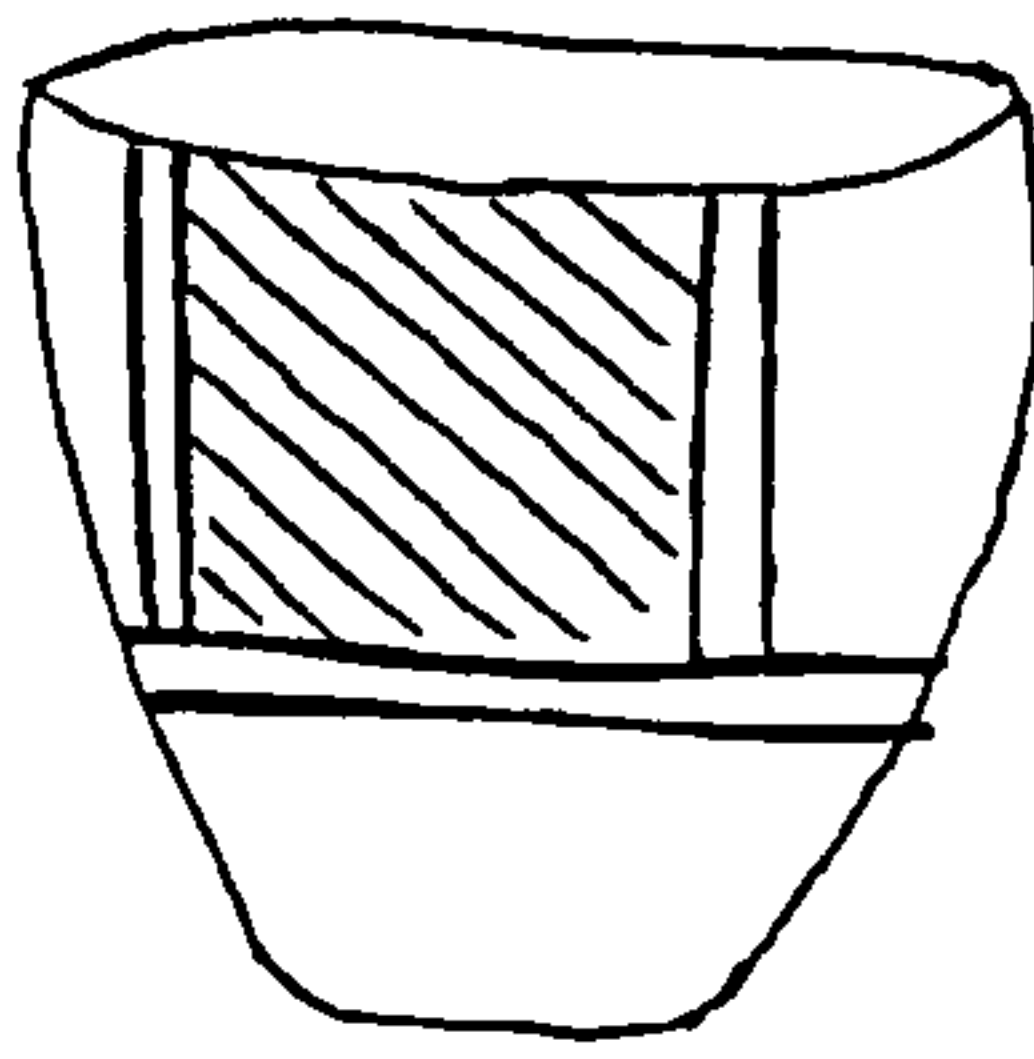
The matt dark on light, now known as Early Matt Painted, had much in common with its lustrous predecessor: certain shapes and decorative motifs as well as the same potters' marks (Atkinson et. al. 1904 p.102-3). However, the lustrous ware died out, while the matt survived through City II to merge into "early Mycenaean." The fabric is also noticeably different: rather coarse, dingy gray to light red. (ibid p.103). The shapes found in the first excavation include amphorae, small, large and straight sided jugs, cups, double cups, two handled bowls and pithoi (ibid pp.104-105). To this catalogue the 1911 excavation added kantharoi, spouted jars and spouted bowls (Barber 1974 p.26-27). Barber points out that it is now often hard to tell matt paint from worn lustrous, but the shapes and fabric are both very distinctive and different from each other (ibid pp.18 and 25).

The decoration of this type was generally geometric and rectangular, often intersecting groups of parallel lines (Renfrew and Evans forthcoming p.25), though some curvilinear and figured decoration was used (Atkinson et.al. 1904 p.105).

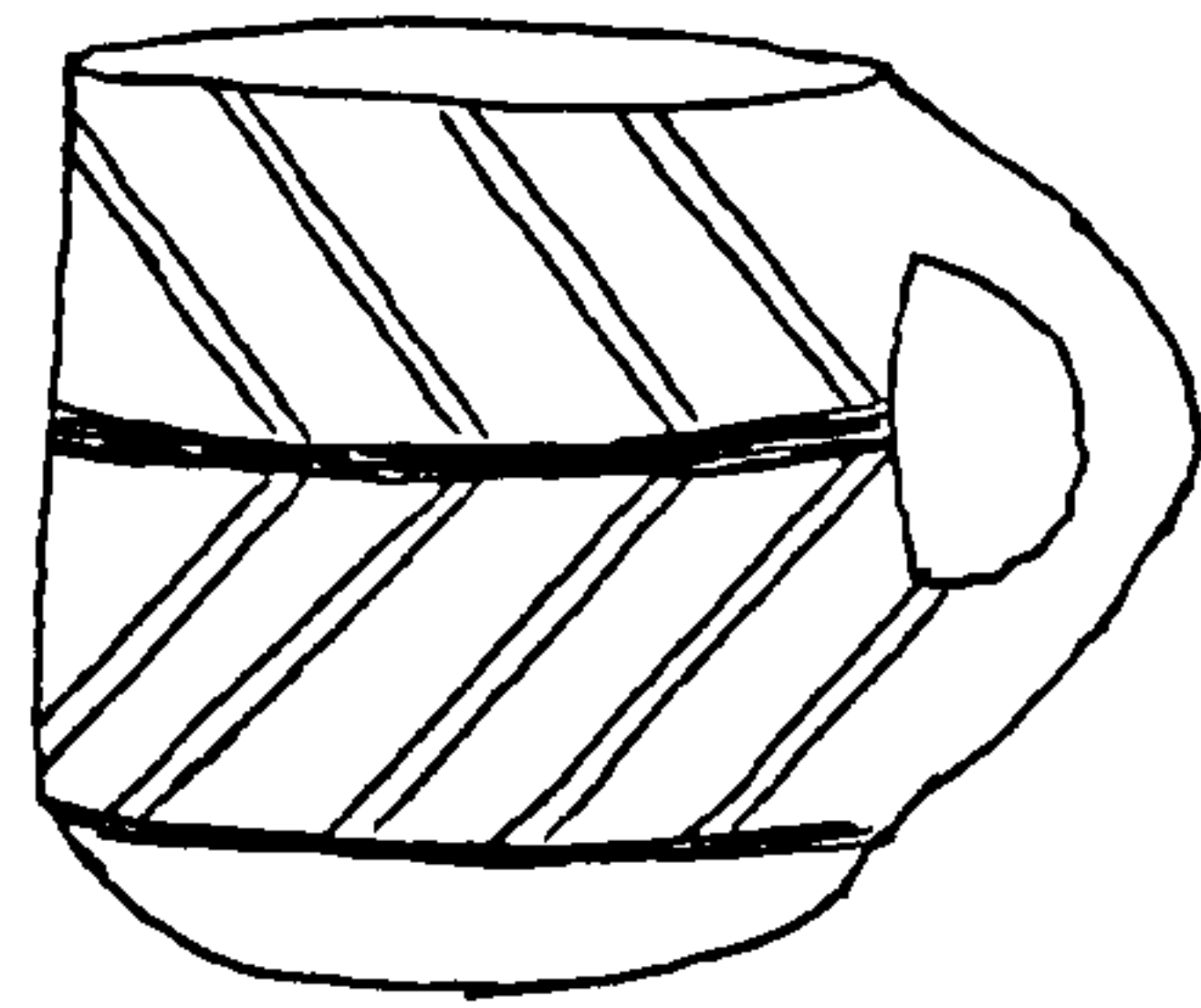
Although Edgar mentions the use of white decoration on a lustrous black background, it is only a small group with some of the same shapes and motifs as lustrous dark on light, and made of the same fabric (ibid p.96). It has been suggested that this use of painted light-on-dark replaced the earlier incised and white filled style



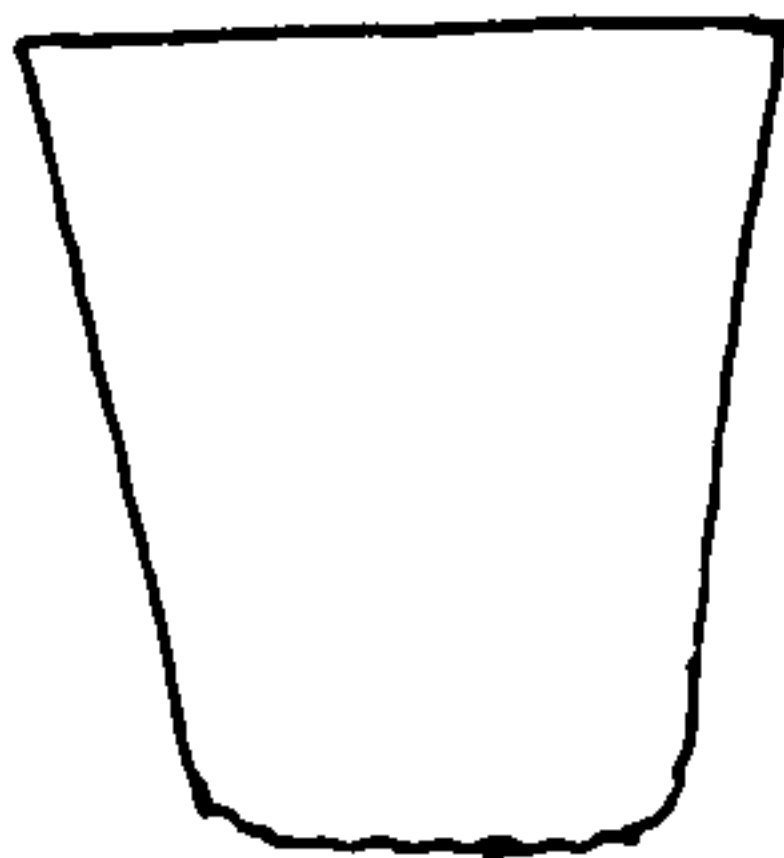
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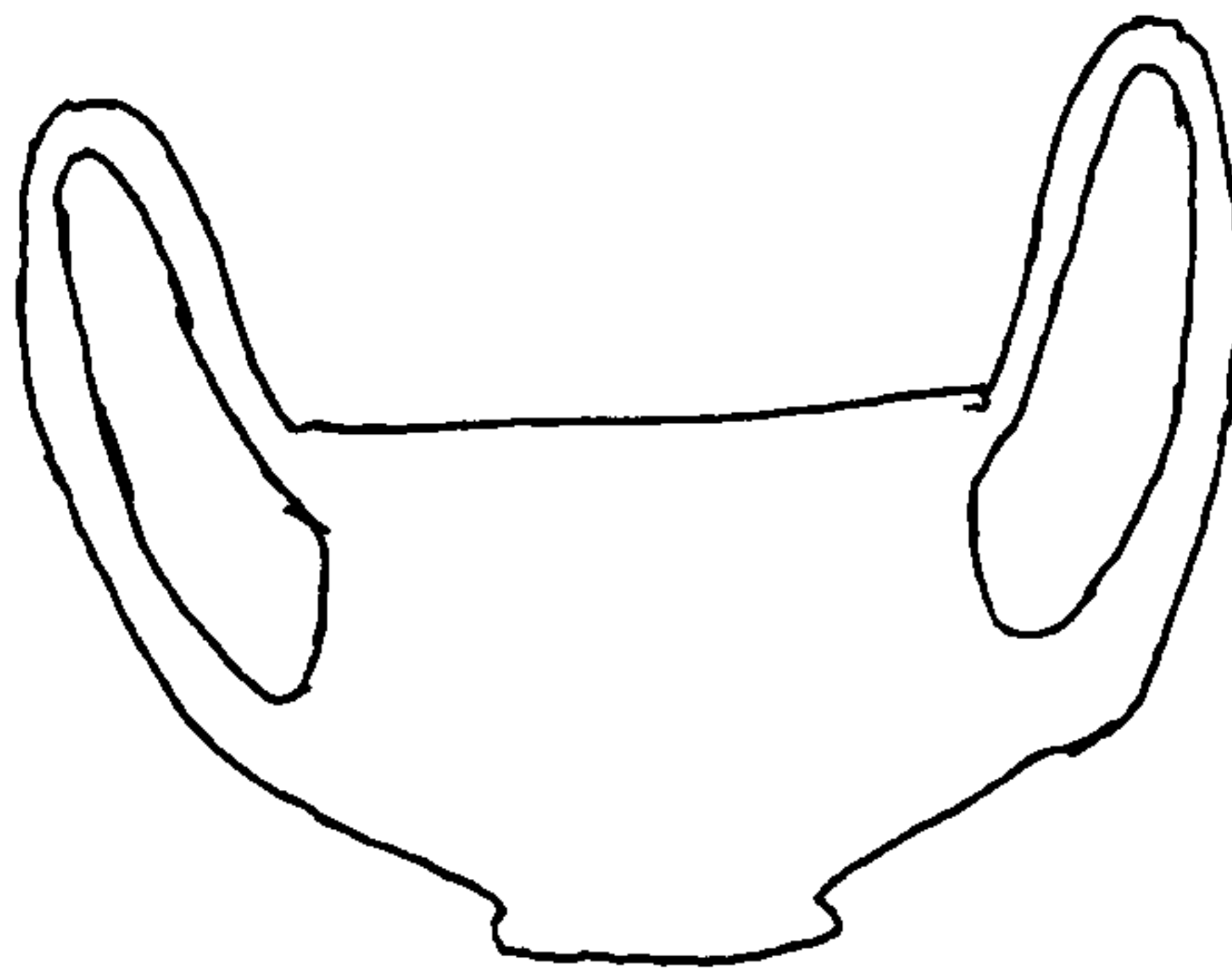
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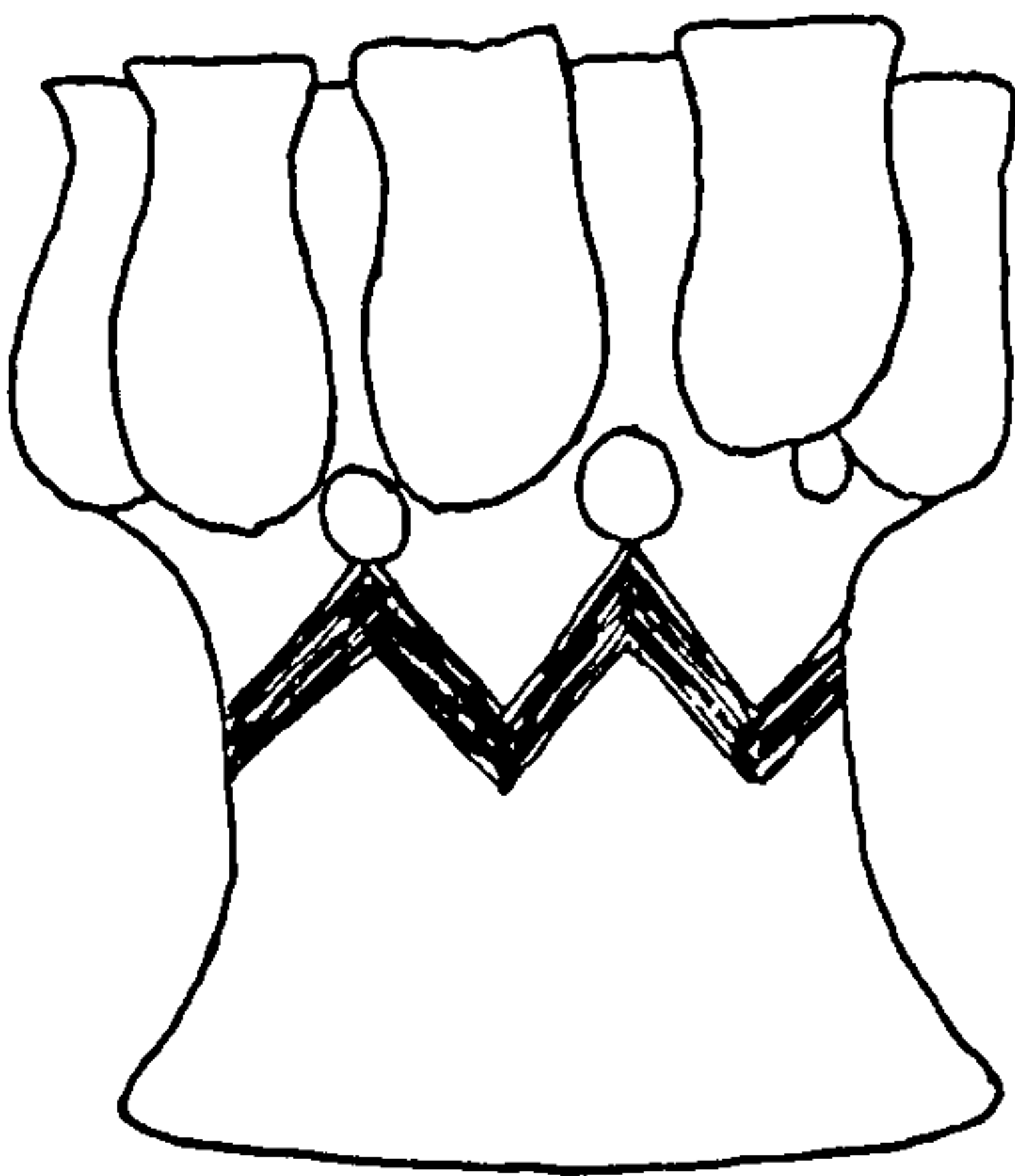
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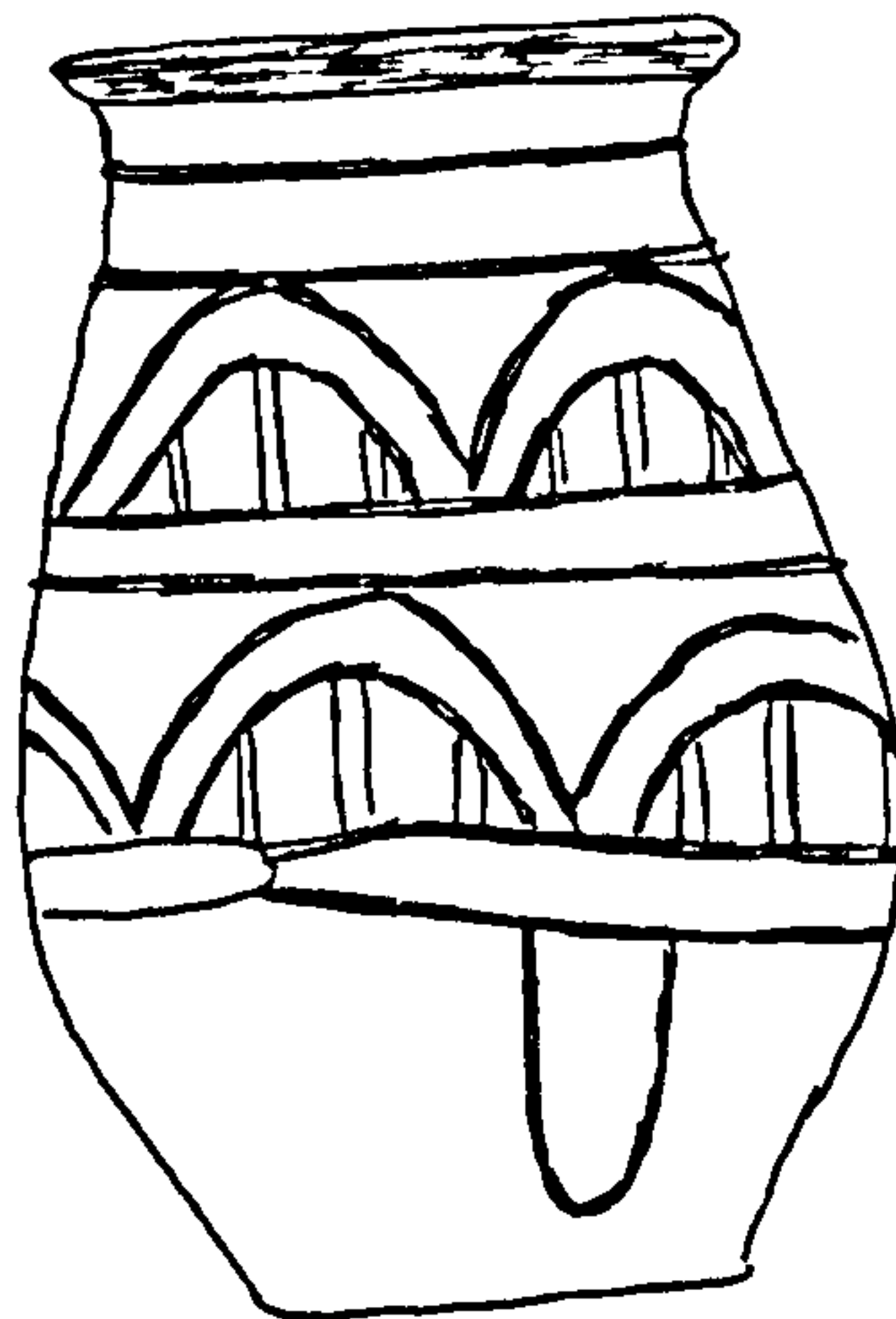
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6. Geometric pottery: a) juq, b and c) cups with geometric decoration, d) cup e) kantharos, f) kernos, q) barrel jar with geometric decoration

(Barber 1987 p.95). Barber has once again added more detail. The shapes include beaked and round necked jugs and amphorae (Barber 1974 p.27-28). The beaked jugs have supplied a date range for the fabric, being found from phase Iiii to IIIi (ibid p.27).

Some pottery from phase A continued into phase B: Heavy Burnished, Burnished (Red)--which should not be confused with the MC fabric Dark Burnished. This is a thin well fired fabric, generally brown or gray with sandy grit and an even bright red burnish--a few pieces of Urfirnis and Soapy wares, which may be survivors from the previous phase, Urfirnis Related, Incised--very rare--Buff Smooth, which may be the undecorated counterpart of Early Matt Painted, and both Thin and Thick coarse, the former once again the most common (Renfrew and Evans forthcoming pp.27-30).

Some fabrics first seen in phase A2 became more common in phase B, such as Early Cycladic White, which is made from a local volcanic clay (ibid p.31). This fabric, which was discussed by Edgar under the name "Early Mycenaean with Designs in Matt Black" (see below p.68) can be difficult to distinguish from Early Matt Painted, but Cycladic White has a chalkier fabric and even, definitely black paint (ibid p.21). Chalky Slip is another local fabric, a buff ware with powdery white slip. Early Dark Washed also continued (ibid p.31).

New fabrics included White on Red, which is a rare decora-

tive technique only used on large vessels such as pithoi and jars (ibid p.26), Thin White Wash, another light-on-dark fabric used mostly for storage vessels, and Black, an unburnished ware with occasional white decoration. All three are probably local products (ibid pp.30-31)

The pottery from phase B corresponds well to Edgar's picture, except for the lack of incised ware. It has been suggested that there may be a gap in the record of trench pi-C, from which most of the phase B material came, and that the incised ware belongs there (ibid pp.33-34).

Phase B is characterised by a decrease in imported pottery. None of the new fabrics were imported, with the possible exception of some Phylakopi I Incised and Coarse wares. Those fabrics which continued in use from the previous period can be imports (ibid pp.34-35). Evidently the Phylakopi potters were beginning to expand their own styles and occupy more of the market.

DARK BURNISHED (figures 7 and 8)

The next type, known as "Dark Burnished" or "Red Slipped and Burnished", was mentioned briefly by Edgar under "Odds and Ends" in the original report, but it has since been recognised as one of the two main MC fabrics. For that reason the discussion of it is placed here, in approximately its chronological position in the pottery sequence.

Two shapes are mentioned in the original report: large

bowls and short necked amphorae (Atkinson et.al. 1094 p.154). Not surprisingly, our understanding of this ware has since been greatly expanded. It occurs in both undecorated and decorated forms, the decoration being usually white and/or black paint, though some relief and fluting or ribbing is also found. The fabric is generally coarse and gritty, though finer examples have been found elsewhere, such as Mikre Vigla on Naxos (Barber and Hadjianas-tasiou 1989 p.86-87). It is uncertain whether the Naxian pieces are finer because they were locally made in a different clay--certainly there is another burnished fabric there which may be an import (see below p.68)--or whether the general tendency was for small pieces to be of finer fabric than large (Barber pers. comm.).

From both the 1911 and later excavations, a large number of shapes have been recognised. In the undecorated form there were goblets, bowls, flaring cups and lids (Barber 1974 p.28). There was a far wider range of decorated shapes: three types of cups, seven types of bowls, including the Melian spouted variety, three types of stemmed bowl or goblet and six types of jar (Barber forthcoming pp. 7-25).

The painted decoration can be simple and linear or more elaborate, with spirals, dotted patterns or birds (Barber forthcoming p.31-32). It would appear that the more elaborate patterns are later (Barber pers. comm.). Fluted decoration is common, especially on larger vessels, but appears to be mainly an early MC feature (Barber forthcom-

ing p.28). There may be some connection with Mainland Minyan ware, which has been found at Phylakopi (see below p.79). Minyan shapes were imitated in Dark Burnished (Barber forthcoming p.35), including the characteristic ring stemmed goblet.

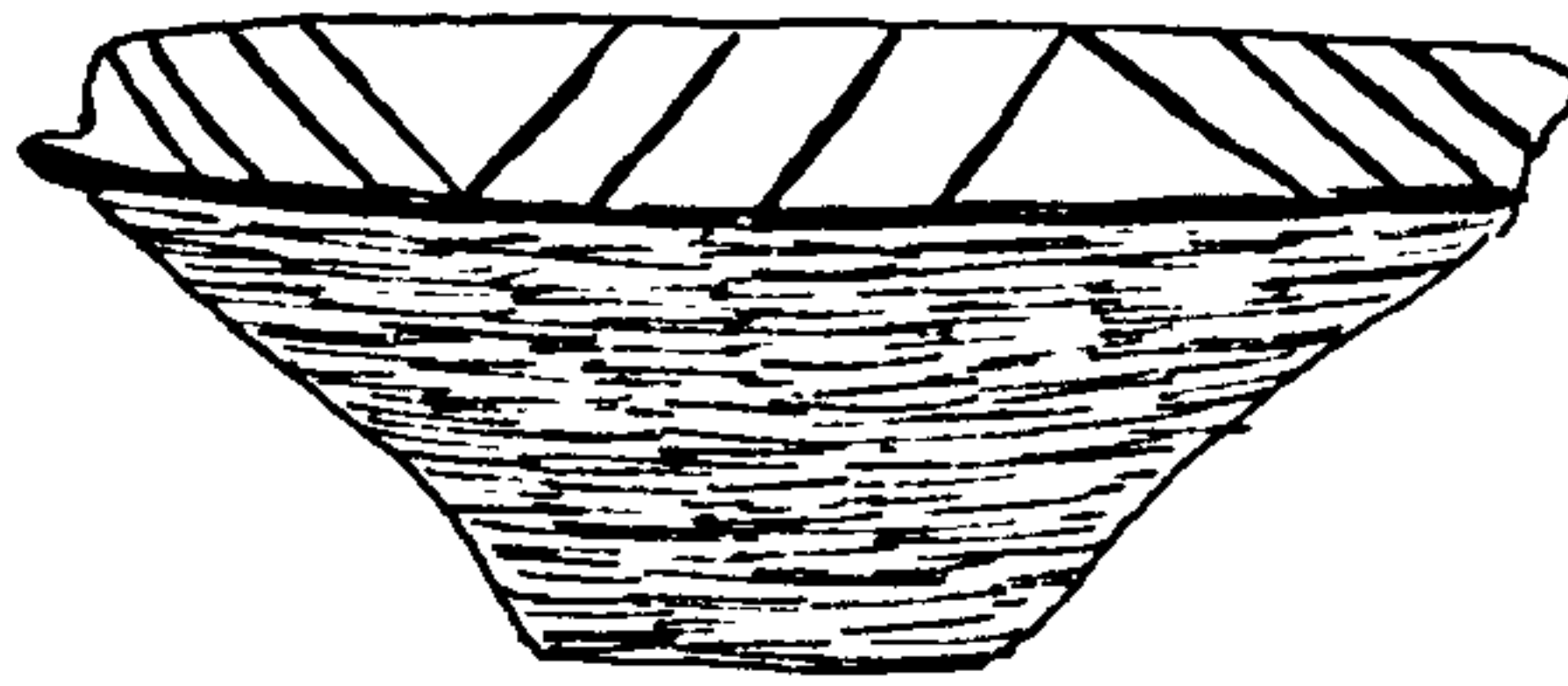
Dark Burnished was a very popular ware across the Cyclades as well as on Melos. It is well attested at Ayia Irini on Kea, though there it occurs in two types: burnished, without slip, which is the most common, and slipped and burnished (Overbeck 1989 p.9). As mentioned above, it has also been found on Naxos, where there seem to be two types: one in a greyish fabric (like Melian Cycladic White), which may be an import, and another in a soft, brick red fabric, identical to the local plain ware (Barber and Hadjianastasiou 1989 p.87). Clearly the style was well regarded. It was originally seen as a City II product but now seems to have lasted from early in that period until sometime in the LBA, growing gradually less popular and well made over time (Barber forthcoming p.34). It may have been replaced by a less technically demanding dull red washed ware.

CYCLADIC WHITE (figure 9)

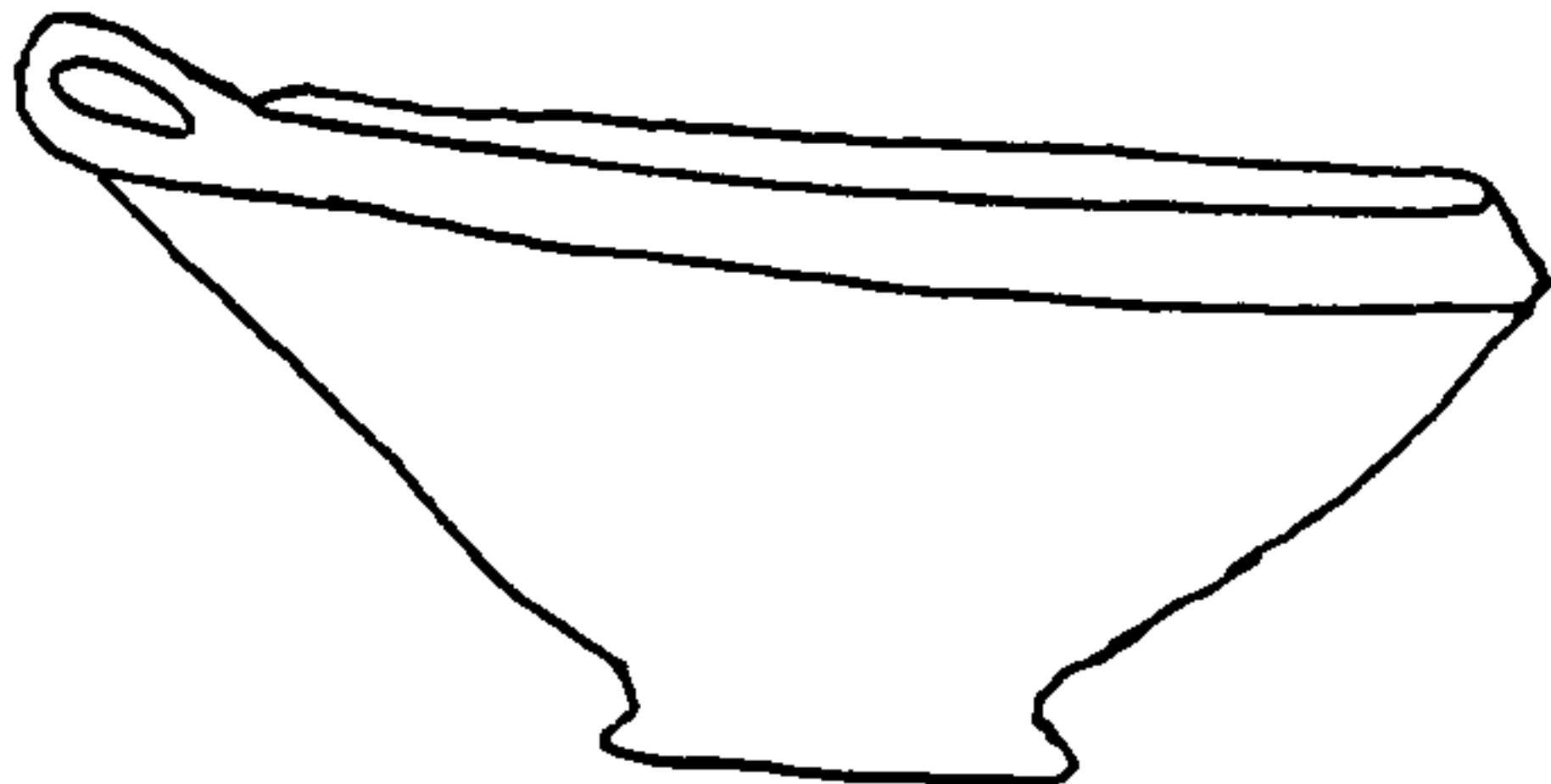
The other main MC product was named by Edgar "Early Mycenaean with Matt Black Decoration." It is now known by the more economical title of Cycladic White, and I will use that designation throughout. The term "Mycenaean" was used by Edgar to denote pottery decorated in a free style, as



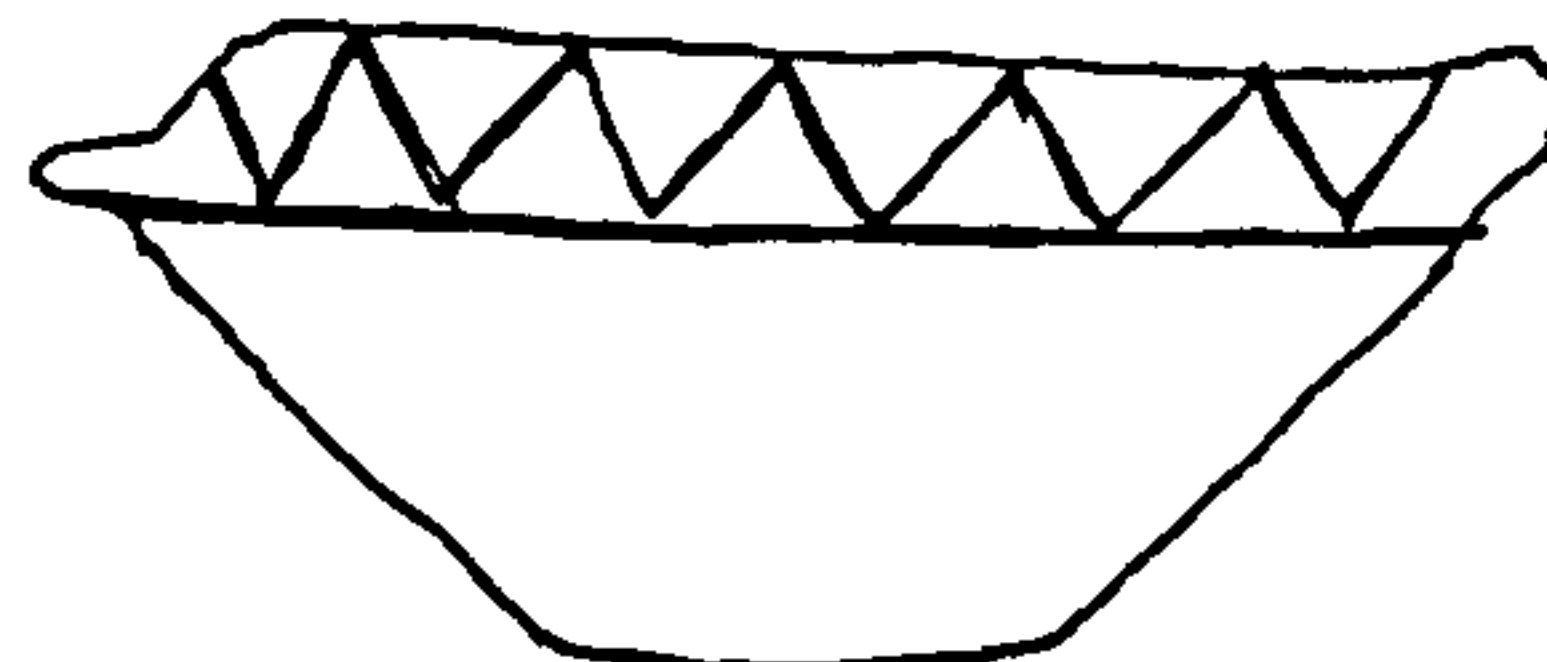
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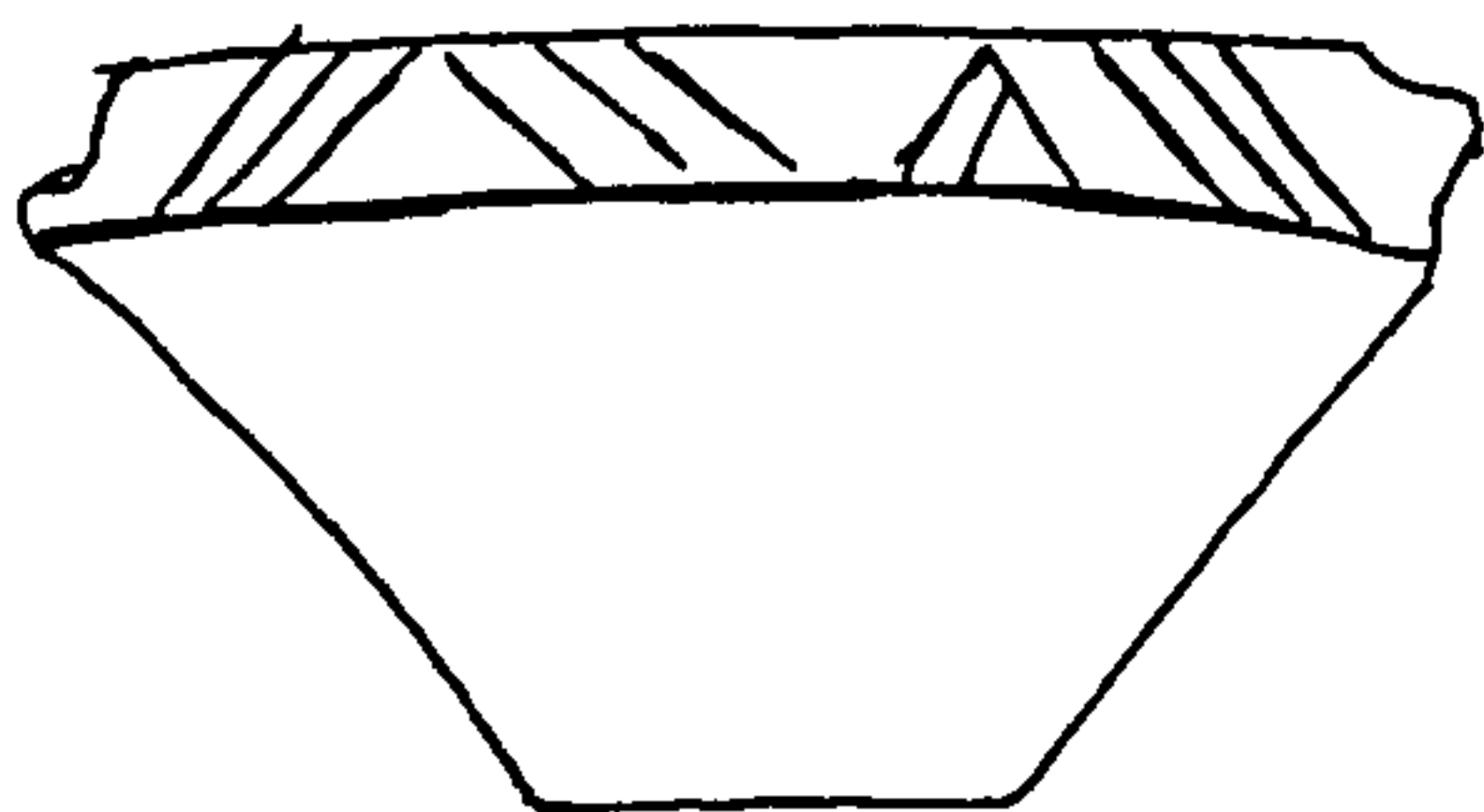
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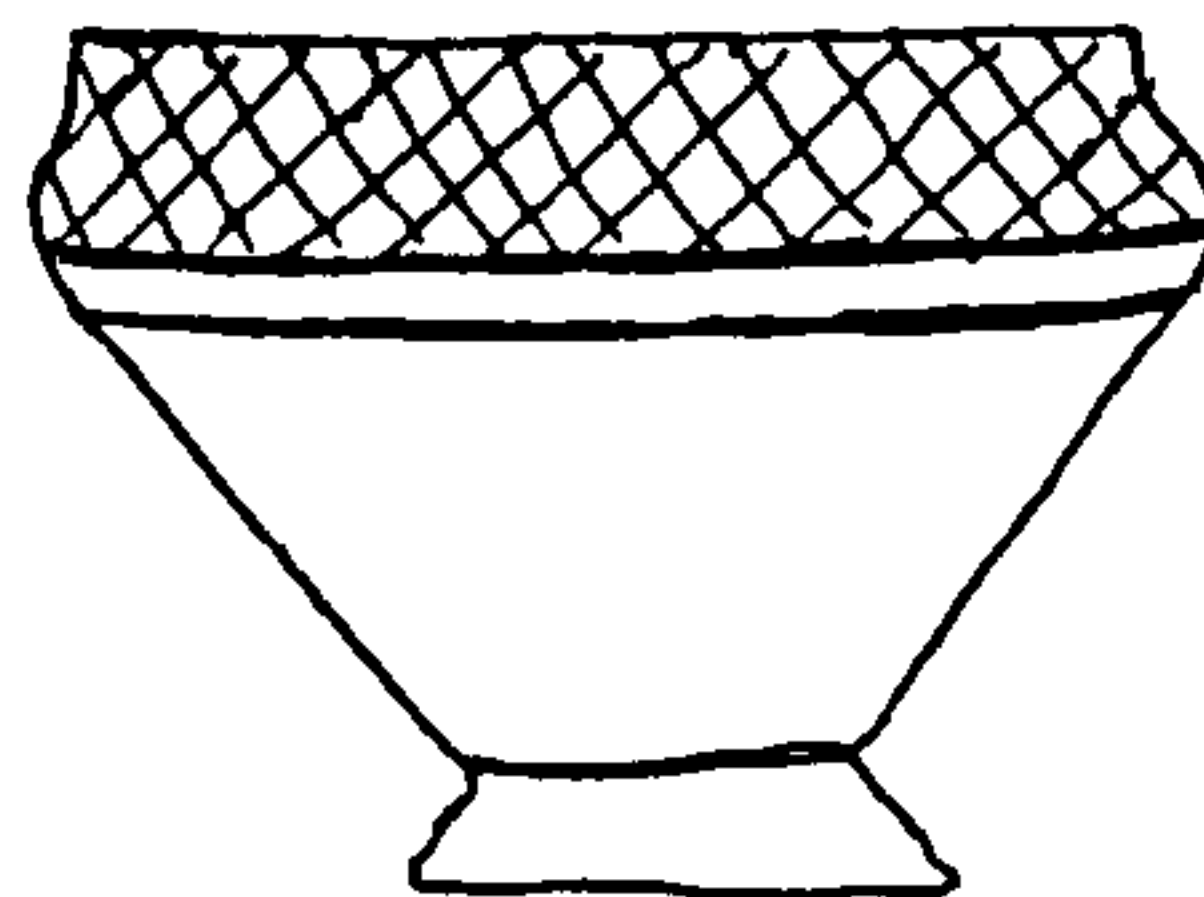
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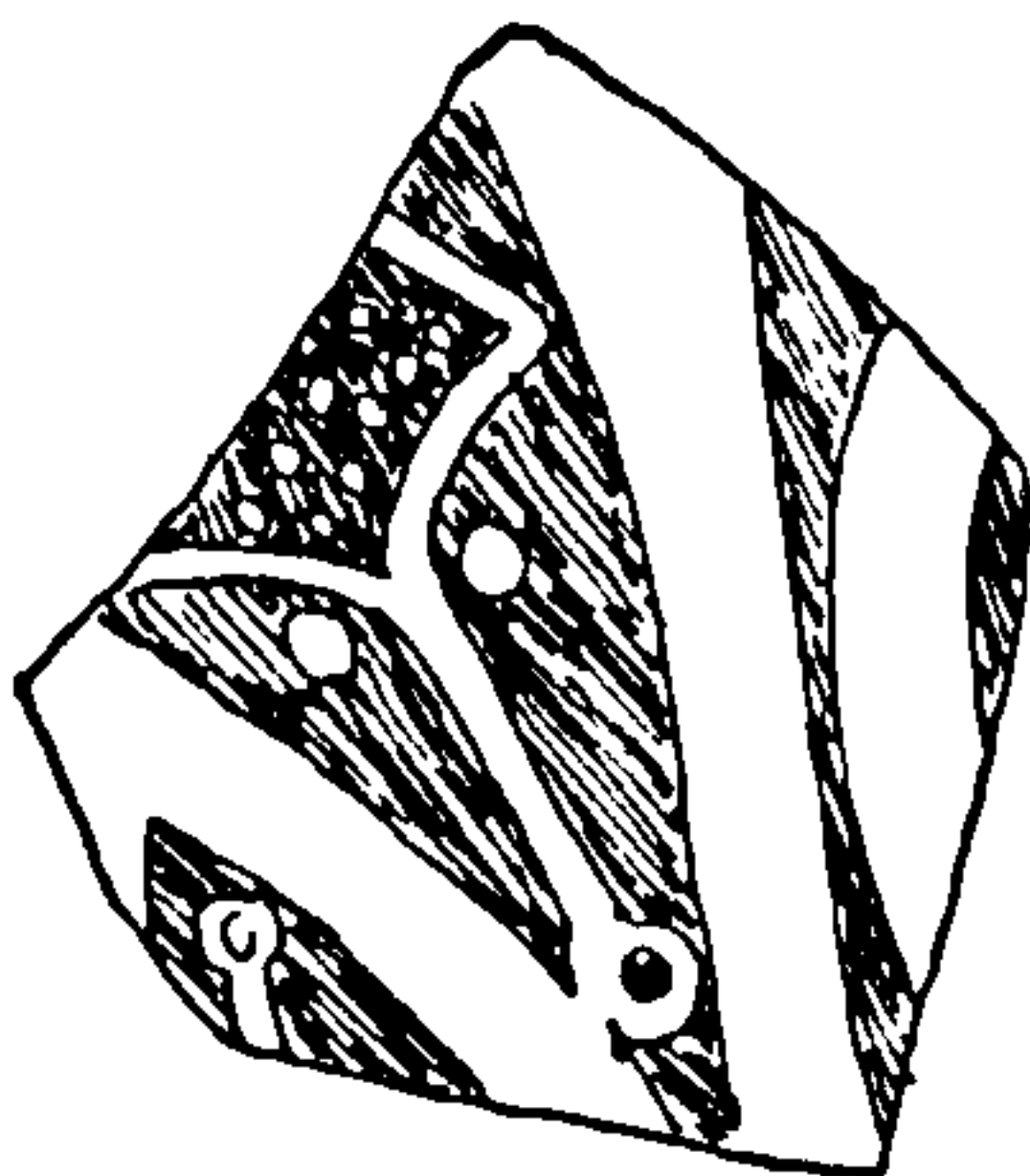
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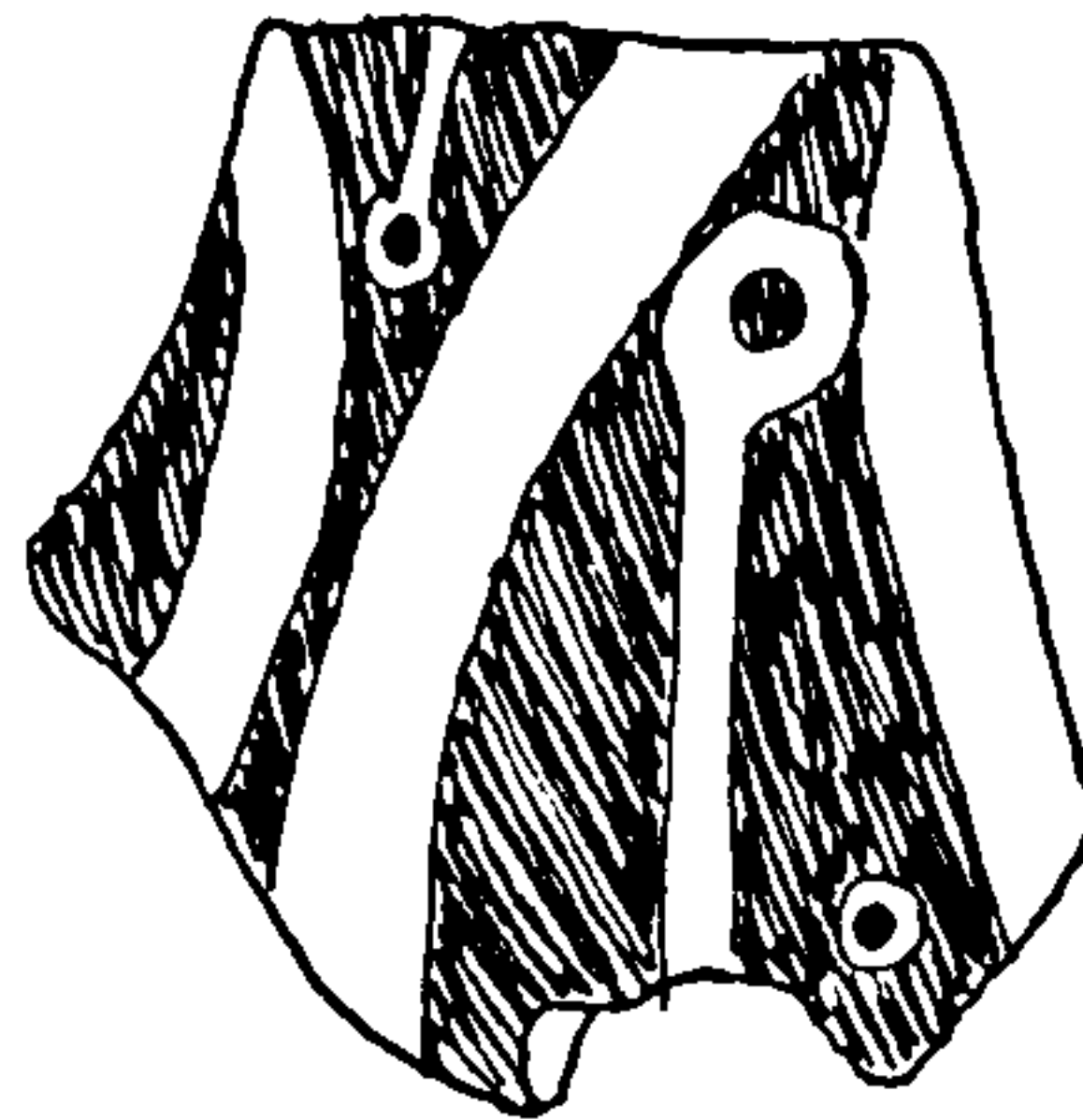
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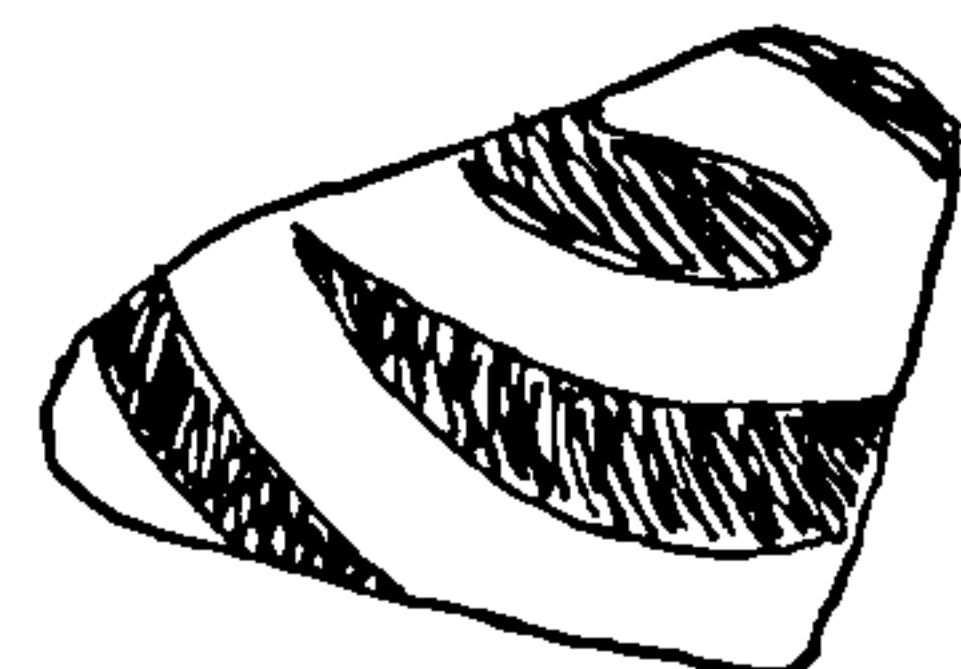
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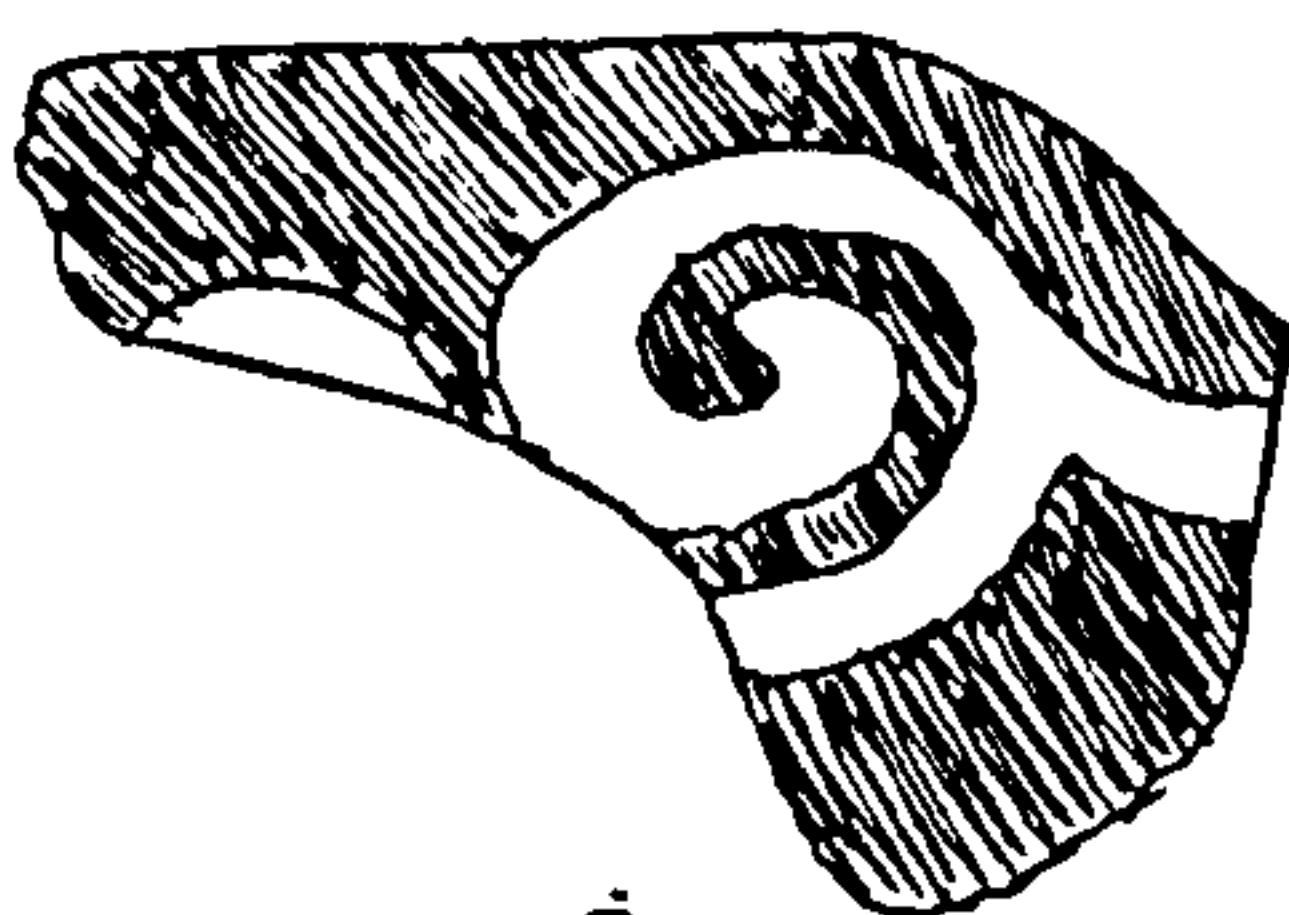
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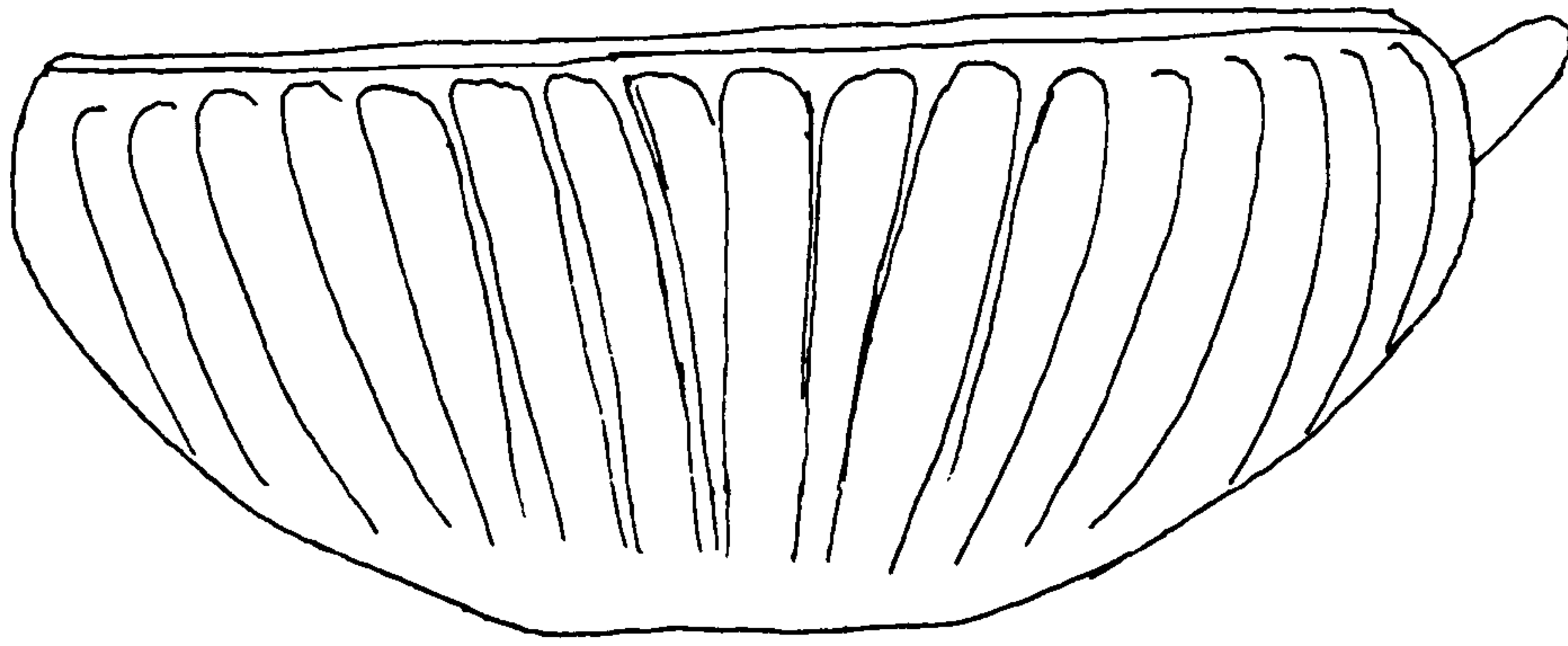


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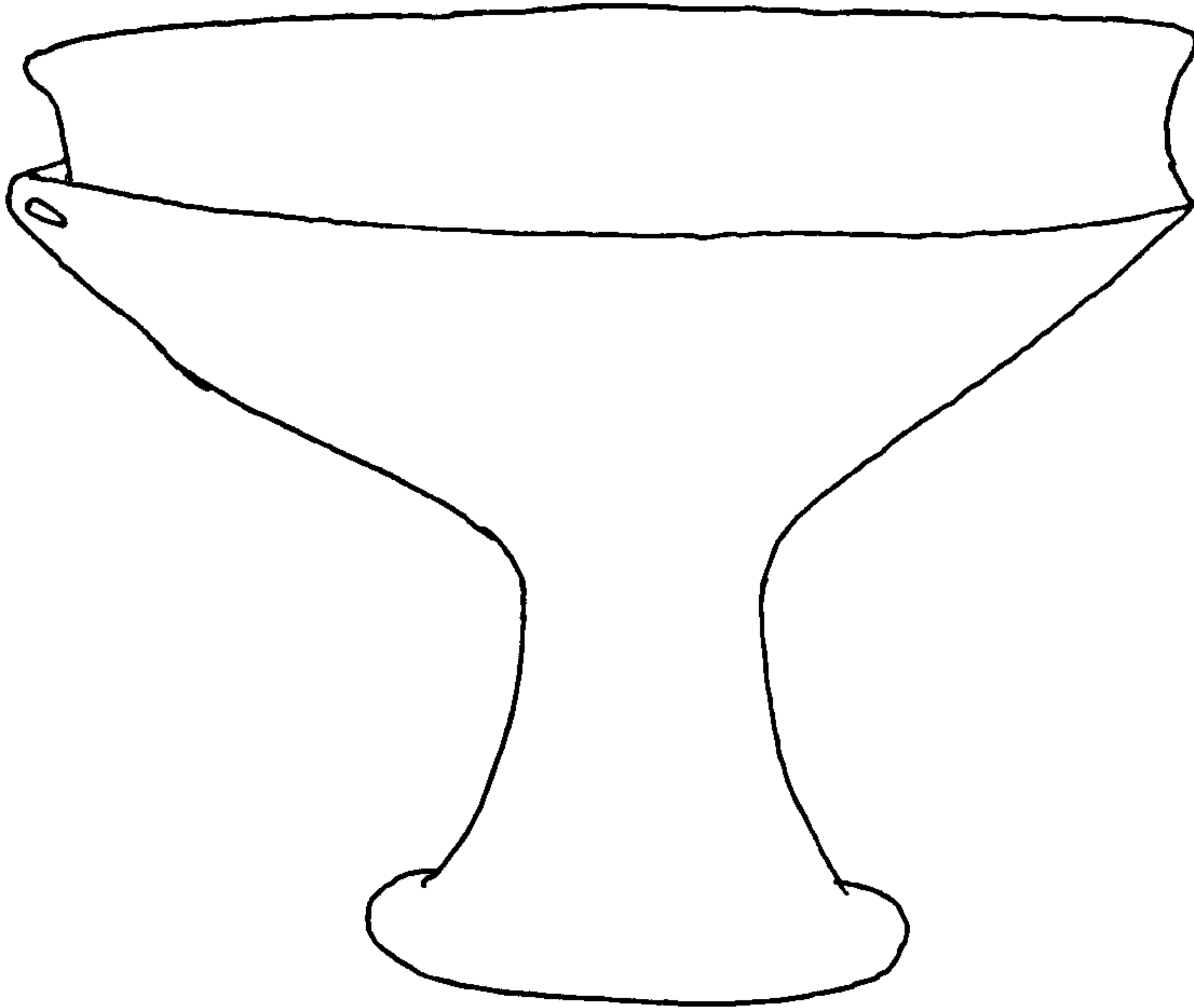


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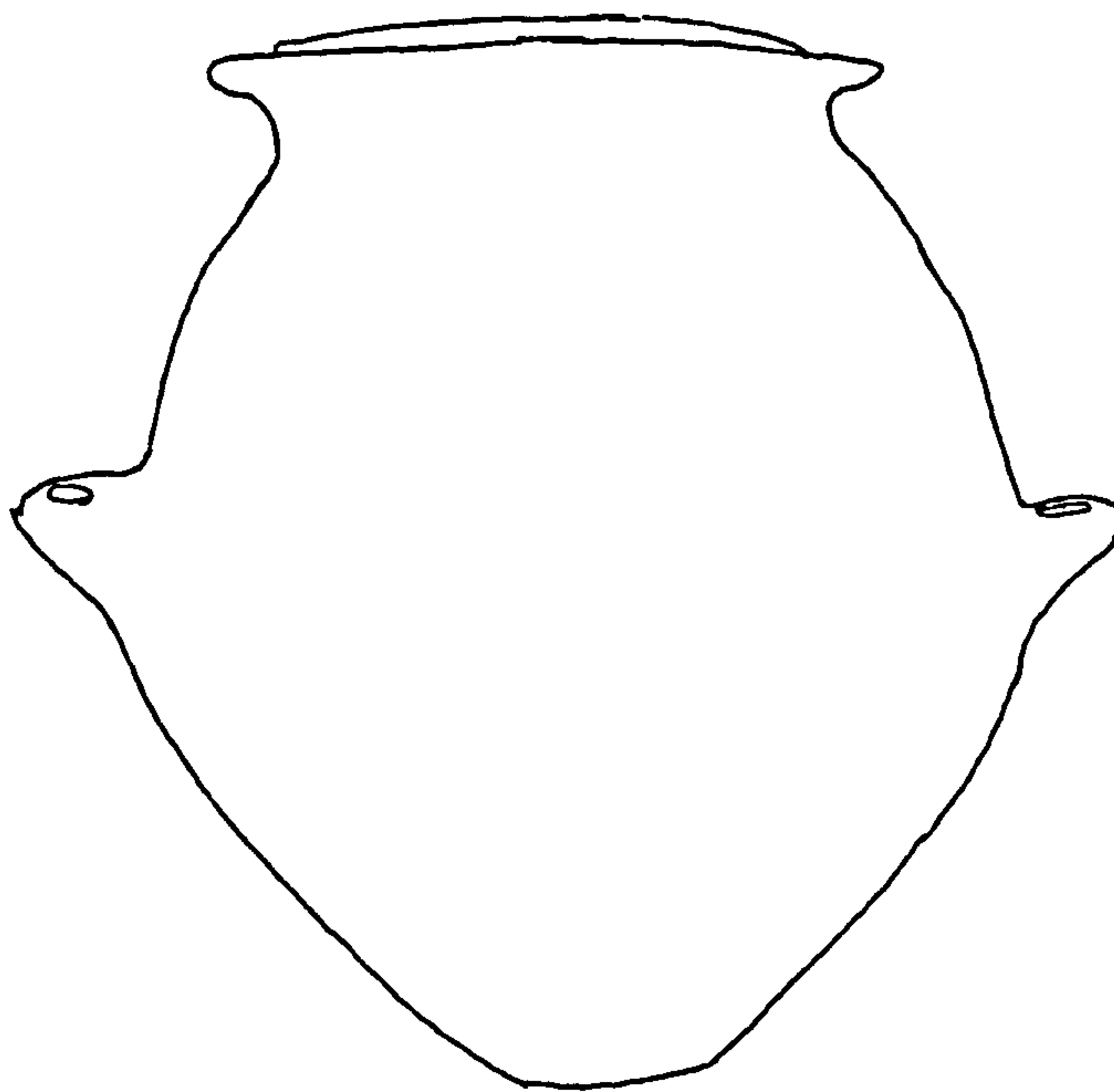
7. Melian bowls (a and b), Cycladic bowls (c-f), Dark burnished ware painted decoration (g-j)



a



b



c

8: Dark Burnished ware. a) bowl with fluted decoration, b) goblet, c) jar

opposed to the earlier rigid geometric (Atkinson et.al. 1904 p.106) It is a more amorphous title than our current use of "Mycenaean", and it may be that certain styles which Edgar saw as "Mycenaean" were actually what is now known as "Minoan" (Barber pers. comm.). To avoid confusion I will use modern alternative designations. In fact, Cycladic White is found most abundantly in City II, that is MC levels, though it continued in use into early LC (Barber forthcoming p.71).

The fabric was fairly fine and rather soft, varying in colour from very light greenish to light red. Some pieces had a light matt slip (Atkinson et.al. 1904 p.108). The paint was matt black, used in linear, curvilinear and naturalistic designs (ibid p.109). Much of the pottery of this period appeared to be wheelmade, and the handles were now attached to the side of the vessel, not thrust through as before (ibid p.108).

The original excavations produced a number of Cycladic White shapes: beaked jugs, sometimes with nipples, "eyes" or an "Adam's apple" in the throat, several types of shallow cups, panelled cups, shallow bowls--with the interior decorated--jars and "flower pots". These last, named for the modern equivalent of the shape, could be painted or plain. The painted ones were always perforated at the base, as if for some ritual use (ibid pp.108-118).

Barber has greatly enhanced the picture of Cycladic White. It can now be divided into two categories, using terms

devised by Caskey at Ayia Irini: fine or semi-fine and coarse or semi-coarse; the latter known as later or coarse Cycladic White (Barber forthcoming p.36). The fabric was first seen in phase A2 (see above p.65) and many of the shapes are derived from EC types (ibid p.71). No new shapes have been found since the first excavation, but more variations have been catalogued: Barber lists three types of cup, seven types of bowl and four types of jar, besides the ubiquitous beaked jug (ibid p.37-60).

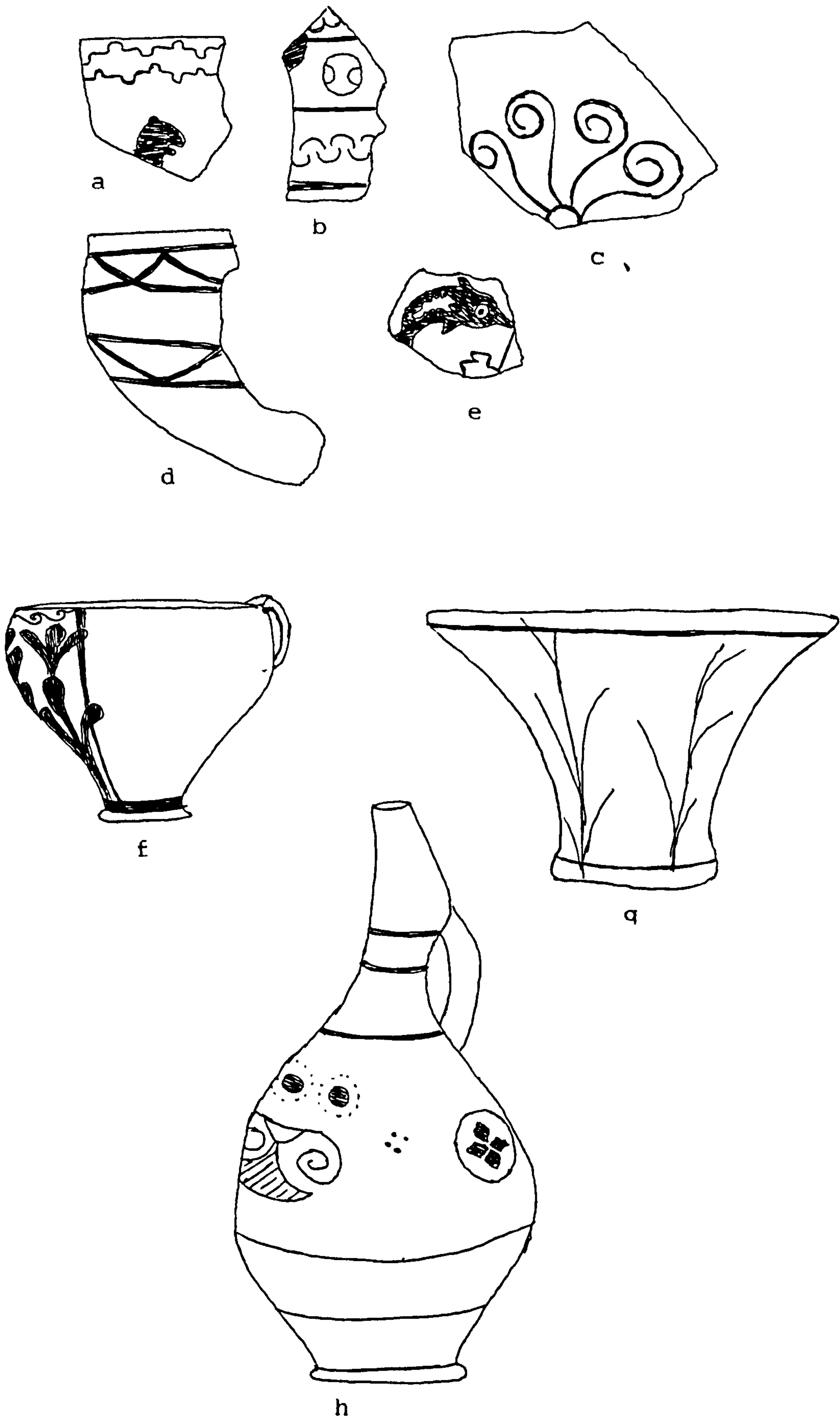
A further analysis of Cycladic White revealed that there was a chronological significance to the different styles of decoration. The curvilinear style is earlier (probably coincident with MMII) and was followed by the naturalistic (MMIII) (ibid p.68). Cycladic White continued into City III and merged gradually into the most popular LC fabric, "Later Local." Some of the later pieces had an additional decorative feature: burnished red discs, used in abstract motifs or as the bodies of birds or pieces of fruit. This "Black and Red" style was treated by Edgar as a separate fabric, but in fact it is a decorative development used on both Cycladic White and Later Local.

Cycladic White was extremely popular and was found all over the Cyclades. It is uncertain whether it was all exported from Melos. No Melian clay has yet been found which exactly matches the analysis of Cycladic White, but a type of rock found S of Phylakopi could have been crushed to add to the clay as temper (and incidentally

would make the fired fabric paler). The addition of this rock would give the finished product the correct microfossils. Unfortunately, the geology of Thera is very similar to that on Melos, so it cannot be definitely stated that any particular piece of Cycladic White came from one place or the other. (Though it has been suggested that the topography of Melos was better for collecting the appropriate materials) (Vaughan 1990 p.486) Barber considers the Cycladic White pieces from Ayia Irini on Kea somewhat different from the Melian, though petrological analysis refutes this (Barber forthcoming p.70 and Davis and Williams 1981 p.297). In the same article, Davis and Williams have stated that the imported pottery found at Ayia Irini was almost certainly brought in as a finished product, as opposed to being made locally from foreign materials (ibid p.300). Perhaps the Melian potters produced pieces for different Keian tastes. It is interesting, though not surprising, that while Dark Burnished with its mainland connections was more popular in the early MC, Cycladic White was more widespread later, and looked to Crete at least in part for its decorative inspiration (Barber forthcoming p.71).

BLACK AND RED (figure 10)

Edgar's "Early Mycenaean Black and Red" is really a development from Cycladic White. He notes shapes like those of its predecessor, plus several types of jug, amphorae, various jars and pithoi (Atkinson et.al. 1904 p.119). When considering the material from the 1911 excavation, Barber noted that Black and Red vessels had been found at Knossos



9: Cycladic White. a-e) decorative motifs f) panelled cup, g) flower pot, h) beaked jug with "nipples"

and Myrtos on Crete and at Asine, Mycenae and perhaps Korakou on the Mainland (Barber 1974 p.35): an indication of the widespread popularity of Melian pottery or its contents across the Aegean.

LATER LOCAL (figure 10)

"Later Local" is the rather vague name coined by Edgar for the dominant local decorated fabric lying chronologically and stylistically between Cycladic White and the great influx of first Minoan and then Mycenaean artistic influence. It developed gradually from Cycladic White, the decoration changing over time from predominantly matt black with some lustrous red accessories, as discussed above, to entirely lustrous (Atkinson et.al. 1904

p.129). It was a widely used fabric, made in many shapes. Edgar's list includes several types of cup, bowl, jug and jar as well as rhyta, askoi, "pseudamphorae", now known as stirrup jars, ladles, ring and pedestal vases and pithoi.

Barber has organised a clearer chronological development of Later Local decoration from Edgar's original classification. He has divided it into four groups:

1. Black and Red, which develops in MC. This is one of Davis and Cherry's "conservative" fabrics, which developed from MC into LC. The decoration may have originally imitated Minoan, but this became "debased". Later Black and Red derived from LMIA (Davis and Cherry forthcoming p.2).

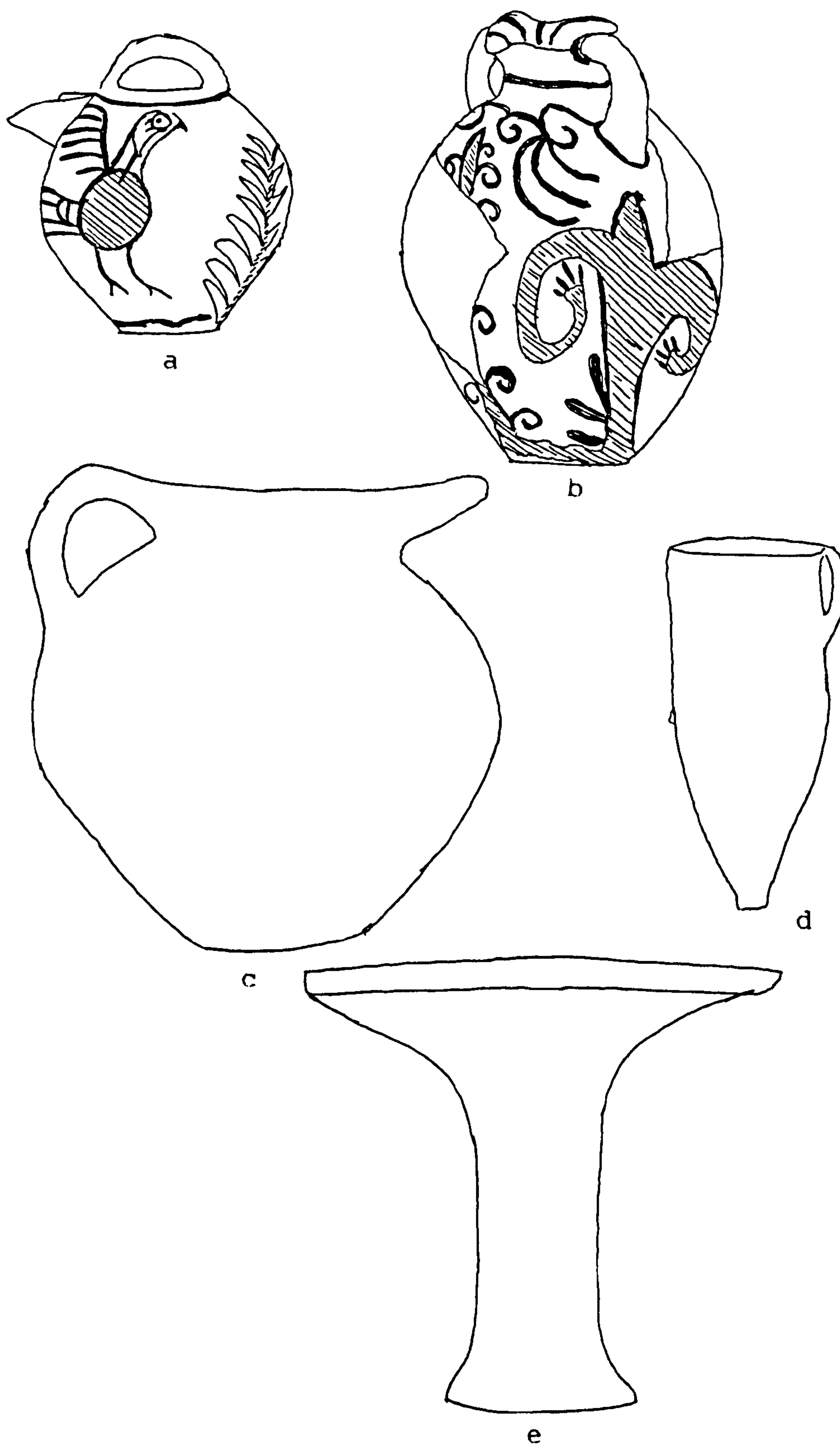
2. black with matt red, which is found in transitional M/LC

levels. This can be known, confusingly, as "Red and Black" ware, and is much more "innovative", though it too imitates LMIA (Davis and Cherry forthcoming p.2).

3. matt black only--standard Cycladic White; and finally

4. lustrous or semi-lustrous. This is an early LC type, imitating LMIA light on dark (Barber forthcoming p.91-92). The decoration used was, of course, often like that on Cycladic White, sometimes in friezes with vegetal and floral motifs. Like its predecessor, Later Local displayed some strongly Minoan characteristics, at least in its early stages (Barber pers.comm.). Overall, LCI and II pottery seems to show less local inspiration than was seen in the previous periods. All the shapes and decoration seem to be derived from Minoan types (Davis and Cherry forthcoming p.36). In fact, some types of decoration continued to be used at Phylakopi after they had gone out of use on Crete, though the new types were imported as well (ibid p.29). Not surprisingly, actual Minoan pottery was also imported.

The beginnings of this "Minoanisation" of the ceramics of Phylakopi could be seen in the MC, with the decoration of Cycladic White often looking to Crete. It increased in the early LC to the point where it almost outweighed any local style. This of course is the period when the "mansion" was built, in the destruction levels of which the Linear A tablet was found. Minoan pottery clearly became very



10: Black and Red (a and b). Red indicated by hatching
 Later Local. c) juq, d) rhyton, e) pedestal vase

popular, hence all the imitations of it, but it would appear that the Cretan influence extended beyond mere fashion. It is interesting to note that some Cycladic type jugs, decorated in Black and Red or matt black, may actually be mainland products, though most seem to have been made in the islands (Jones 1986 pp.430,433).

MYCENAEAN (figure 11)

When Minoan influence vanished after period IIIii, so did Later Local. As far as we know today, there was virtually no locally inspired decorated pottery made at Phylakopi in the late LHIIIA (Barber 1987 p.224). Later Local was replaced by the ubiquitous Mycenaean pottery, known all over the Aegean: a thin, hard, fine buff ware, usually with a well smoothed surface, decorated with lustrous dark paint. Edgar classified most of it as belonging to Furtwangler and Loschcke's third and fourth styles: marine and floral, with some figures. Later the decoration degenerated into mere scrawls (Atkinson et.al. 1904 p.145-6). The shapes were the usual mass produced types such as stirrup jars and kylikes (ibid p.148). Barber was able to add the askos, squat jar and deep bowl (Barber 1974 p.46). The fabric is so different from the earlier local products that it was assumed to be imported, at least at first (Atkinson et.al. 1904 p.146). Later analysis of Mycenaean pottery seems to show that during LHIIIB1, Mycenaean pottery across the Aegean has a fairly uniform style, presumably coming from the Argolid. At the end of that period there are signs of disruptions on the mainland: destructions and abandonments of some sites, fortification

of others. In LHIII B2, pottery styles moved off on their own local tracks, developing from IIIB1 types (Sherratt 1980 pp.199,201). However, once the Mycenaean koine was established, the potters of Phylakopi never again produced a truly local style.

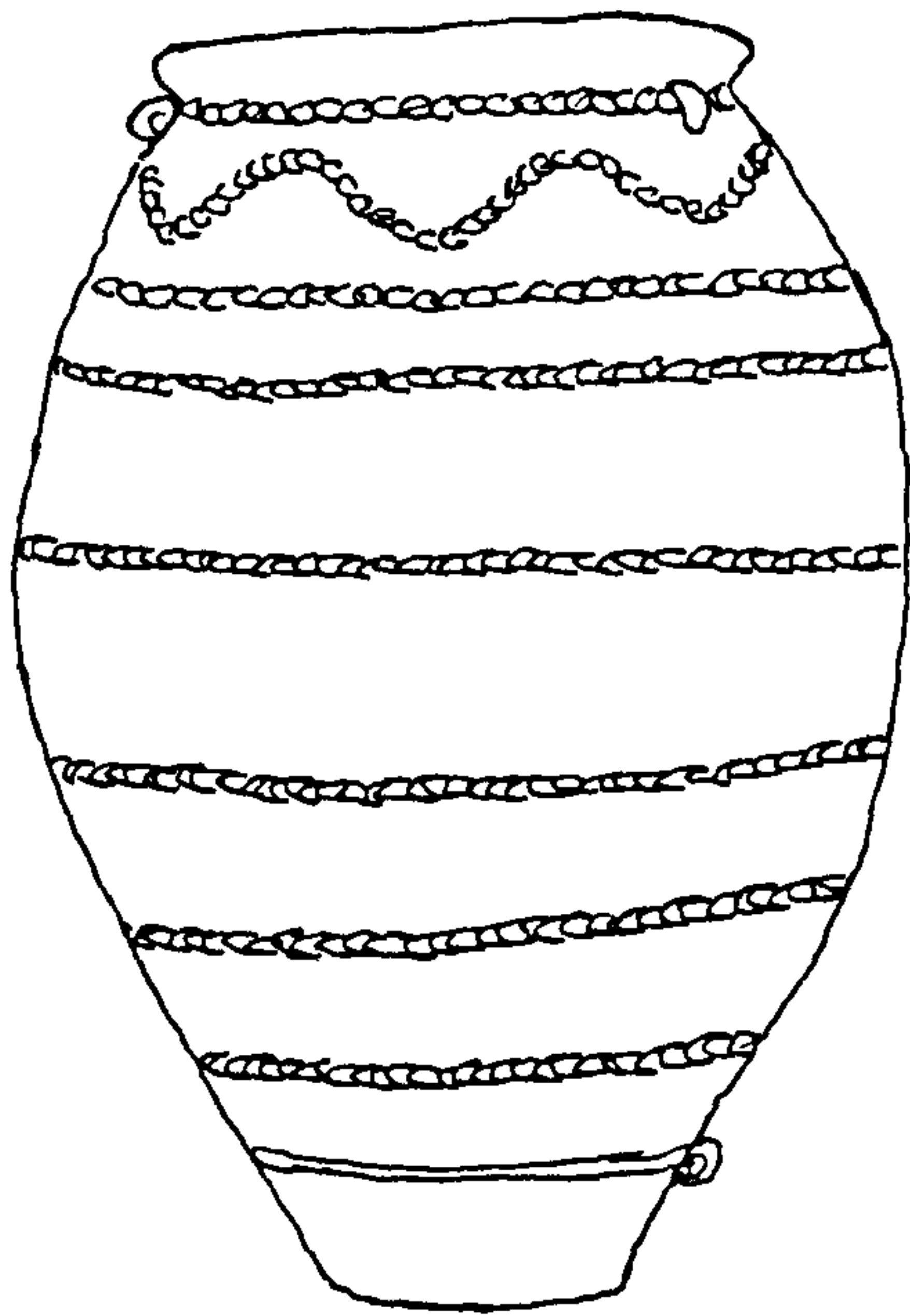
OTHER IMPORTS AND IMITATIONS

In the later LBA it appears that all the fine decorated pottery was imported, but as we have seen, other fabrics were imported and/or imitated in the earlier periods. As mentioned above, Minyan ware was quite popular, especially goblets. In the 1911 excavation at least, it was generally found in association with geometric painted ware (Dawkins and Droop 1911 p.17), though it continued into later levels.

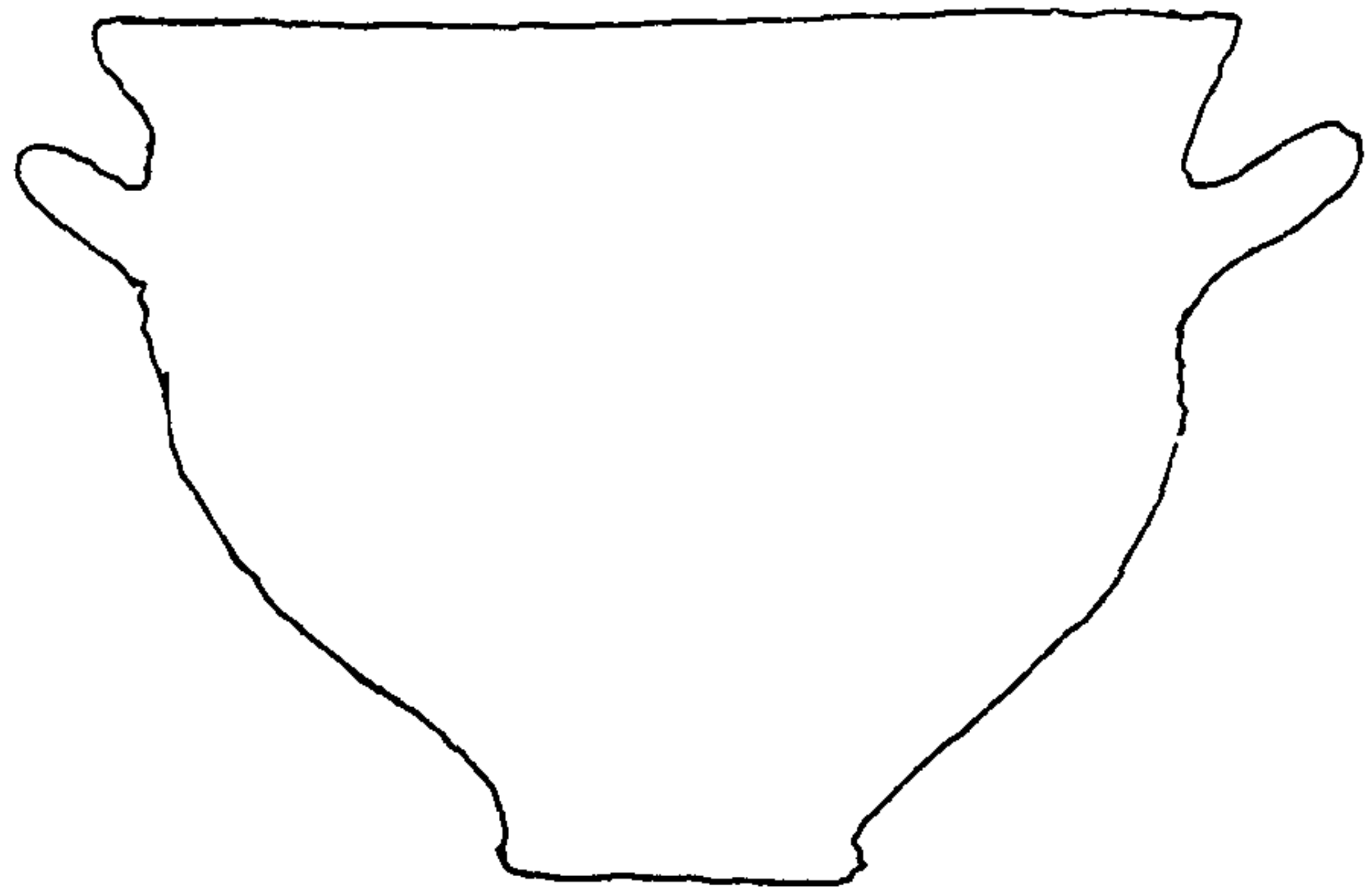
Also found in the MC levels was Cretan Kamares ware. In the original excavation the shapes were generally small: cups, three handled jugs and jars, and the fabric very fine. This led Edgar to assume that the pieces were imported for their sheer aesthetic qualities (Atkinson et.al. 1904 p.151). An imitation was found among the 1911 material (Dawkins and Droop 1911 p.10), perhaps confirming the Melian appreciation of the style.

UNPAINTED AND COARSE WARES (figure 11)

Two types of pottery which were largely neglected until recently are unpainted and coarse wares. The former seems to be mostly late (though it is of course now impossible



a



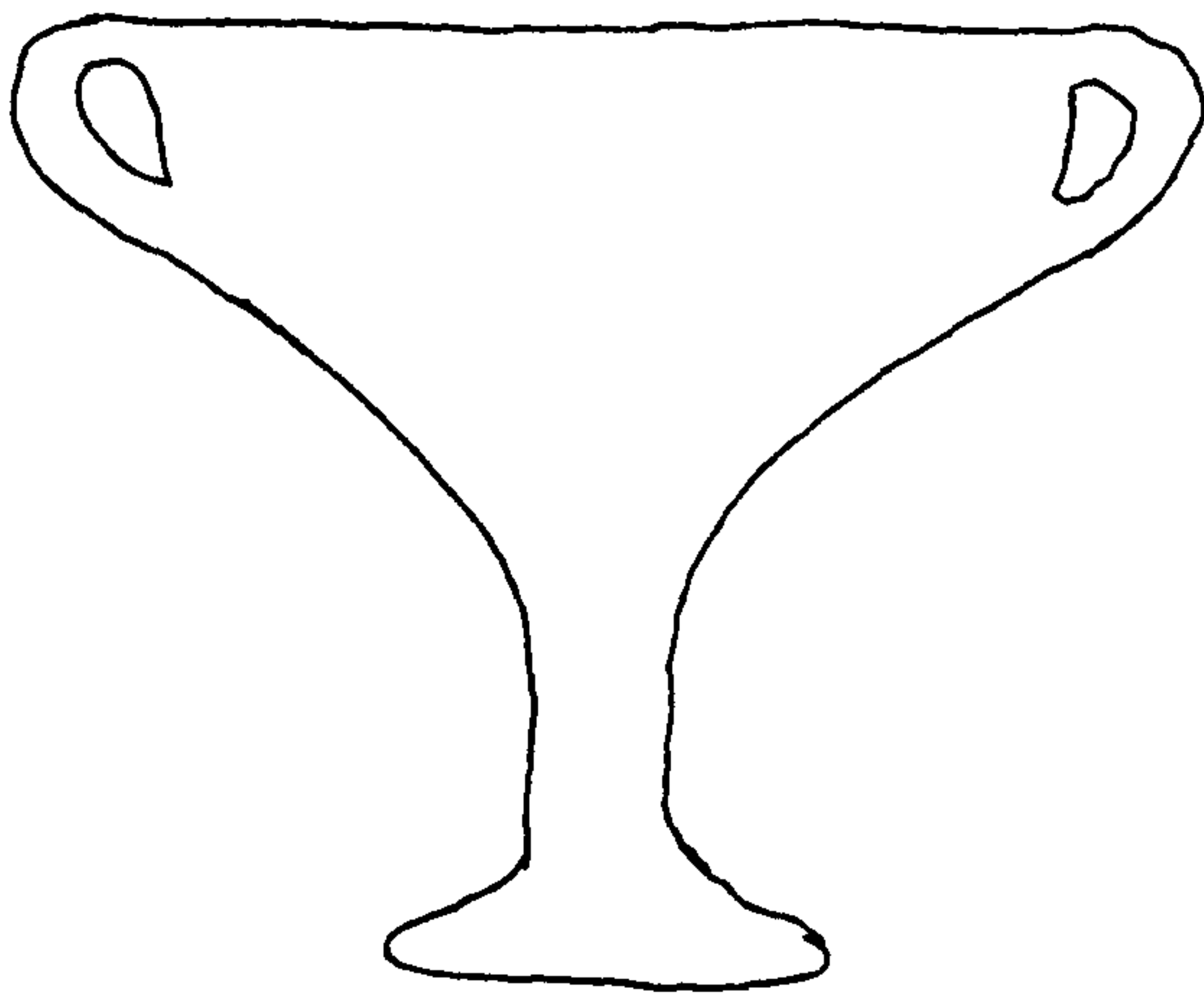
b



c



d



e

11: Coarse pithos with relief decoration (a).
Mycenaean ware. b) deep bowl, c) askos, d) stirrup jar,
e) kylix

to tell how much was discarded) (Barber 1974 p.40). One or two shapes had relief decoration (ibid). The undecorated types include cups, bowls, jars and cooking pots (ibid p.41-2). Coarse ware shapes tended to be less refined versions of fine types (Barber forthcoming p.152). For the MC period alone Barber has identified five different coarse ware fabrics: soft matt painted, late white slip, brittle, coarse white slip and black. He also lists over 20 different shapes, over half of them cups and bowls, as well as jars, jugs and lamps. This wide variety of forms and fabrics should be a reminder of how much has been lost when earlier scholars ignored and/or discarded coarse pottery.

"MELIAN" AND "CYCLADIC" BOWLS (figure 7)

One fine ware shape was so ubiquitous and characteristic that Edgar awarded it a separate section in his analysis: the flat bowl with spout. These are found from late City I through the Mycenaean period, with some changes: Barber lists nine different variations (Barber 1974 pp.42,44-46).

Today, those with burnished surface and white rim decorated with matt motifs are known as "Melian" bowls, the later, deeper and differently decorated versions as "Cycladic" bowls. (Barber 1974 pp.42,44-46).

REVIEW OF CHRONOLOGY

It may now be useful to give a brief chronological re-cap of the Phylakopi pottery sequence, as illustrated in

figure 12. The first pre-city pottery, probably imported, was red and brown burnished, with a little later some black glazed and lustrous decorated and some coarse ware with impressed decoration. Later, in phase A2, there was more ware painted with geometric decoration as well as stamped and incised and Urfirnis. Much of the pottery was imported.

With the building of City I the burnished ware changed to the lustrous coated "Early Dark Faced", and the painted ware was refined into lustrous dark on light. Later the paint became matt, and this type, as well as the occasional use of matt white on lustrous dark slip, continued into City II. During that period two fine fabrics dominated the scene: first Dark Burnished, sometimes imitating Minyan shapes, and slightly later, Cycladic White. This type continued into City III, to merge into Later Local, with its increasing use of lustrous decoration. Later Local was abruptly superseded by standard Mycenaean, which persisted with minor stylistic variations until the site was deserted.

Having established the general sequence of pottery types and their relationship to the history of the site, we can now go on to look specifically at the potters' marks and begin to analyse their use.

Heavy Burnished	
Burnished (Red)	- - - - -
Soapy	
Coarse Thin	- - - - -
Coarse Thick	- - - - -
Repeated Pattern	
Broad Streak	
Thin Line	
Early Matt Painted	
Urtinis	
Urtinis Related	
Huff Smooth	
Early Dark Washed	

White on Red
Incised
Chalky Slip
Black

lustrous Dark on Light
White on Lustrous Black
Dark Burnished

-----Cycladic White
Black and Red
Red and Black

later local
Mycenaean

Minyan
Kamares

12: Phylakopi pottery sequence

SECTION III: ANALYSIS OF THE POTTERS' MARKS

INTRODUCTION: DEFINITIONS AND METHODOLOGY

A "potters' mark" is here defined as any mark or group of marks deliberately incised or impressed into, or applied onto, a vessel prior to firing. Painted marks and graffiti added after firing have been excluded, in the former case because they may represent a different system or at least could have been applied for different reasons or by someone other than the potter. Graffiti are excluded because clearly they could have been made by anyone at any time after the vessel was fired, and so cannot safely be shown to have any bearing on the original production or distribution. Some vessels, most notably large Cretan pithoi, bear long inscriptions in Linear A. Although isolated symbols from both Linear systems are included among the potters' marks, these long written inscriptions are not, because once again they represent a different thought process: memoranda from an external communication system, as opposed to a more primitive form of notation referring exclusively--as far as we know--to the pottery industry. This is not to imply that the inscriptions did not serve a purpose analogous to the potters' marks, merely that they are not appropriate to the present study.

METHODOLOGY

Marks were collected from three sources: published accounts, unpublished or not yet published notes made by other archaeologists and personal examination of pottery in museums and storerooms. Each marked piece was given an index card on which the following information was recorded

if available:

Area-i.e. Mainland, Crete or Cyclades

Site name

Number-marks from each site were numbered sequentially for ease of reference

Date

Type-shape of vessel and whether it was open or closed

ID-any museum, inventory or context number

Ware-description or name of fabric, i.e. "semi-coarse", "gray, reddish tan exterior" or "Cycladic White"

Provenance-locally made or imported

Find Spot

Mark Location

Mark Description

Notes-any other information or comments, including the source of the piece

A sketch of the mark was made on the front of the card and to the back was attached a photocopy of any published illustration or a photograph taken when the piece was examined.

All of this information was then entered into a computer database. The form used was essentially the same as that on the index card, with the addition of two fields: Mark Type and Shape. Mark Type assigns the mark to one of seven categories, established first by Aliki Bikaki in her analysis of the marks from Ayia Irini, Kea. The categories are: fingernail impression, cut/dent, oval/round impres-

sion, linear, pictorial, applied and impressed (Bikaki 1984). The names are mostly self-explanatory, with the possible exception of "pictorial". This is used for Linear A or B symbols or any other mark which is clearly intended as a drawing as opposed to a simple linear arrangement. It sometimes proved difficult to assign a mark definitely to one of two specific categories, particularly when presented with only a written description with no illustration. In these cases both names are used: i.e. "cut or linear" or "linear or pictorial", and the ambiguous marks are treated as separate categories.

Once all the information was entered into the computer, it was possible to sort all the data with a view to bringing any patterns to light. Eight different sorts were devised, each designed to highlight different information:

1. Mark Type—for each mark type, lists description, location, vessel type, fabric, date and number. Shows where and when each mark type was used.

2. Shape—for categories "open" and "closed", lists date, mark type, location and number. Shows what types of marks were used on open and closed vessels and when.

3. Vessel Type—for each type, lists date, mark location and number. Shows what marks are used on what forms and when.

4. Date—for each date, lists marks type, location and num-

ber. Shows which marks are used in each period.

5.Provenance-for categories "local" and "imported", lists date, mark type, vessel type, shape, fabric and number. Shows which marks are used locally and which imported, and when.

6.Fabric-for each fabric, lists date, mark type, location, vessel type and number. Shows where and when each fabric type is marked.

7.Mark Location- for each location, lists mark type, date, shape and number. Shows patterns of positioning.

8.Find Spot- for each find spot, lists mark type, date, shape and number. Shows any site wide patterns of marked pieces.

The field "number" was included in each sort for ease of reference concerning individual pieces from one sort to another.

All eight sorts were applied to each site in turn. For convenience sake, sites with less than 20 marks were sorted together. The site name was always included to prevent any confusion. The results can be found in the Appendix. The reader may note that in several cases there appear to be several sorts with the same name, i.e. "Mark Type" and "Mark Type 2". This is simply because all the

information could not be fitted onto one page in the required columnar format, so the sort was divided as necessary.

The data produced by the sorts were then reduced to a series of percentages: i.e. 33% of marks from Aegina are linear, and of those 43% are found on the side of the vessel. From these percentages the trends and patterns of mark use can be determined for each site and comparisons made between sites. It must be stressed that where X% of marks from a site is mentioned, that means X% of marks available. There are very few sites for which we definitely have a complete catalogue of marks, and in many cases not all the information needed was available, especially in the provenance and find spot fields. Therefore, no particular statistical validity is claimed for the results. However, certain definite patterns do emerge, from which some hypotheses can be put forward about the use of potters' marks and the organisation they may represent.

The material is dealt with in four parts. First, the marks from Phylakopi are examined. The material from the 1974-77 excavations is dealt with separately from that of the earlier projects. Then the comparative material is considered. This is divided by area: other Cycladic sites, Mainland sites, including Aegina, and Cretan sites. Each site is dealt with separately, and then any regional patterns are discussed. The patterns are compared with those from Phylakopi. Finally, there is a survey of marks from some other periods and cultures with more historical

documentation, to give an idea of the known uses and purposes of potters' marks.

PHYLAKOPI 1974-1977 (figures 13-56 and plates I-LXIV)

276 marks were found among the pottery from this excavation. 43% of the marks were linear. These tended to be relatively simple groups of lines; in fact, 32% consisted of a single line, and the next largest groups were two lines (7%) and X (6%). Most linear marks were found on the handle (38%), then base (30%) and side (28%). Linear marks were used from the EBA through LHIIIC. They were found on a variety of fabrics, especially those of medium fine texture (35%).

Some more elaborate marks have been classed as linear/pictorial (3%) or pictorial (2%). These were used on the side (54%), generally on fine to medium fabrics--a fine buff ware represents 18% of the whole. Marks include the double axe, house and something which may represent a fish.

Oval/round impressions were the second most common mark type, at 40%. They occur in various combinations of one to four circles or ovals, but the most common are one (20%) or two (24%) circles--bearing in mind that many of the pieces are fragmentary and part of the mark may be missing in some cases. 69% are on the base, the rest on the side or base and side. They are found in contexts dating from the EBA through LHIIIC, but seem to be concentrated in the MC (29%) and LCI (35%) range. Where the vessel type can be determined, it is most often open, usually cups and bowls. Oval/round marks are found on a variety of fabrics, especially Cycladic White (27%) as well as dark burnished

(15%), medium fine and medium (10%) each) and fine (14%). They seem to have been used on coarser pieces only very rarely.

The fingernail marks common at Ayia Irini (see below p.154) represent only 2% of the Phylakopi marks. They are generally found on the base (83%) and were used on various, mostly fine or medium fine fabrics. Cut/dent marks made up another 6% of the total. They are generally found on the base (60%), again on fine to medium fabrics.

In a few cases more than one type of mark was used. Two pieces had applied and linear marks: an applied boss with a cross on it and several lines combined with an applied crescent. Both are of LCI date. Four pieces combined linear and oval/round, usually with the impression at the end of the line(s). 3 were on the side, 1 on the base.

Only one impressed mark was found, on the base of an LHI "flower pot". It consisted of two "poked " marks. The neck of an LHIIIC vessel bore five pierced circles and part of a sixth on the neck, though these may be decorative rather than a true mark.

38% of the Phylakopi marks were on open vessels. They cover a range of dates, but most are MC (36%) and LHI (35%). Oval/round marks were used most often: 60%, with a further 23% linear. The base bore 78% of the marks.

10% are known to be closed vessels. The most common date is MC (30%). 33% are linear, and they are found on the base (37%) and side (48%), with a further 11% located low on the side.

The whole development of the Phylakopi marks is treated in more detail below (pp.99 ff.), but the computer analysis points up some trends. EC represents only 11% of the total. In ECII/IIIB over half of the marks are linear, and about evenly divided between the base (40%) and more visible parts of the vessel: side 28%, neck 4%, low on side 4%.

The MC produced the largest group, 30% of the total. Linear and now oval/ round impressions are the largest groups, 40% and 38% respectively. The base is used rather more often than before (47%), though the side still accounts for over a quarter.

22% of the marks are from LCI. Here 65% are oval/ round impressions and only 28% linear. The base has become even more popular (65%) at the expense of the side (15%). In contrast, only 3% of the marks are from LHII, mostly linear (40%), but 30% were oval/round impressions. Unusually, the handle is the preferred location (50%).

In LHIIIA marks continued to decline (9% of the total). They are more or less evenly divided between linear and oval/round impressions (35% and 38%), but the base is again the most common location at 65%. In the final phase,

LHIIIIB/C, which produced 14% of the total, the marks are overwhelmingly linear (76%), and tend to be located on the handle (37%) and the side (26%).

48% of marks are located on the base. Of these, 57% are oval/round and a further 27% linear. They cover the whole date range, but most are LCI (29%) and MC (30%). 40% of marked bases are from open vessels. The second most popular location is the side (20%--low on side makes up a further 6%). 60% are linear and 21% oval/round, while in the low on side category 78% are oval/round and only 11% linear. 17% of marks on the side are on closed vessels, while for low on side, in contrast, 44% are on open. Both types cover the whole range of dates, though MC is the most common: 38% of side and 50% of low on side.

A further 17% of marks are on the handle. 89% of these are linear. They cover the whole date range, with a slight concentration in LHIIIIB/C (31%).

There is only one group of marks which appears on more than one part of a vessel at a time: 3% are marked on both base and side. 89% of these marks are linear. Their date range is from EBA to LCI but 44% are MC. Where the shape can be determined, 33% are open.

A variety of different fabrics were marked, ranging from fine to coarse, though it would appear that the treatment of the fabric is more important than its texture: of the

many small conical cups, of fine fabric but carelessly made, none were marked, while vessels of quite coarse, thick fabric but carefully shaped and finished do bear marks. (See below p.201 for contrast with Cretan marks).

25% of the marks are on Cycladic White. 74% are on the base. Most (59%) bear oval/round marks, but linear was also used (19%). The pieces cover a range of dates from EC/II/IIIB to LHIIIB/C, concentrated in MC (38%).

9% of the marks are on Dark Burnished vessels. Most of the pieces seem to be open: 32% on different types of bowls, 4% on Cycladic cups and a further 32 on open vessels of undetermined shape. 60% of the marks are oval/round and 32% linear. The dates range from MC to LHIIIC but seem to concentrate on LC (44%) and MC (28%). The majority (64%) are marked on the base, 20% on the side and 16% low on the side.

Among the less distinctive fabrics, 6% are a fine buff ware. This seems to be mostly relatively early (27% EC, 5% MC) with a concentration in LHI (33%). Most are marked on the base (89%), the rest on the side. 32% are known to be from open pieces, mostly cups or bowls (22% are panelled cups) 61% of these fine buff pieces have oval/round marks, the rest linear, cut/dent or fingernail impressions.

Another 8% of the marks are on other fine wares. Base and side each bore 32% of the marks, but the edge of the base, neck and handle were also used. 50% of the marks are

linear and only 18% oval/round. Medium fine wares made up 25% of the marks. 52% are linear, 24% oval/round. They range in date from EBA to LHIIIC. 40% are marked on the base, 30% on the handle.

18% of the pieces are of medium textured fabrics. 34% are on the handle, 25% on the side and 22% on the base. 54% of the marks are linear and 33% oval/round.

Only 11% of the pieces were medium coarse. 35% of these date to LCI and 29% to MC. 56% are marked on the base, 32% on the side. 56% of the marks are linear and 33% oval/round.

Only 4% were truly coarse. Most (80%) had linear marks, the other one was a cut.

Almost uniquely among the sites studied, the marks from Renfrew's Phylakopi excavation all have a note of their find spot. Marked pieces were found all over the site, but 2 areas produced relatively large concentrations: piC, in the megaron/mansion area and PLa, outside the shrine.

From piC came 54 marks, 19% of the total. All date from phase D or earlier; that is, prior to LCI: in fact, the material from piC represents almost our only EC examples. The marks are mostly linear, with a gradual addition of oval in phases B and C.

If this is a genuine concentration of marks, and not

simply a factor of lack of investigation of phase B and C levels elsewhere, then it has important implications. The megaron and mansion indicate that there was administrative activity centred on this area. The larger than average number of marks could show that this was an administrative area even before the coming of the Minoan and Mycenaean bureaucracies.

The marks from PLa a further 21% of the total. these cover a later date range, from phase C/D (late MC) though phase F, LHIIIIB/C.

PHYLAKOPI-EARLIER EXCAVATIONS

Turning now to the marks from the earlier excavations at Phylakopi, we must bear in mind that these are a more random sample, as a systematic search for marks does not seem to have been made through all the pottery found, and indeed much has been discarded or subsequently lost.

54% of the marks are linear, all fairly simple. 59% of these are on the handle, another 14% on the base. Just over half are on medium ware and another 25% on medium fine.

Only 27% of the marks are oval/round impressions. 25% of these consist of three impressions. As usual, most (48%) are on the base, with a further 23% on the base and side and 23% low on the side. The shape are nearly all open, half being spouted Melian or Cycladic bowls. 35% of the

oval/round impressions are on medium fine ware.

Nearly half the marks are known to be on open vessels (46%). Of these, 56% are oval/round impressions, 29% linear. 40% are on the base, another 17% low on the side. Only 5% are known to be closed. They are mostly linear (70%) and have various locations.

The handle is a much more common location in this group than in the 1974-77 material (42% as opposed to 17%). 75% of the marks are linear. Only 24% are located on the base. Of these, 52% are oval/round impressions, and 31% linear. Nearly three-quarters are on open vessels.

14% of the marks are located on the side, with a further 8% low on the side. 72% are linear, and about one-third are on open vessels.

In many cases the vessel type could not be determined, but 15% were spouted bowls, and other types of bowls represent a further 7%. Most were marked on the base (57% and 61% respectively). Jugs made up another 11%, about half marked on the handle.

The most common fabric to be marked was medium, 38%. It bore mostly linear marks (73%), with a further 12% oval/round impressions. 62% of the marks were on the handle. Medium fine made up another 29%, divided more evenly than usual between linear (47%) and oval/round

impressions (33%). This fabric had a wider range of mark locations, but the handle (31%) and base (25%) were still the most common.

8% of the marks were on fine ware, of which 50% of the pieces were jugs. Half bore linear marks, and half were marked on the handle. Another 6% were medium coarse. 70% of these had linear marks, but none had oval/round impressions. 60% were marked on the handle. There were no marks on true coarse ware.

A comparison of the percentages from the most recent Phylakopi excavation with the whole corpus of Phylakopi marks brings to light an interesting series of similarities. Unfortunately, very little date or find spot information was available for the material from the early excavations, so these categories are not considered.

In the case of linear signs, the most varied group, about 48 different signs were found, in the 1974-77 material and 44 in that from the earlier excavation. Only 14 were shared between the two groups. 16 different groupings of oval/round marks were found in the 1974-77 material (including linear and oval/round) and 20 in the other group. It is noticeable that only the later material includes linear and oval/round combinations, while only the pieces from the earlier excavations bear the larger groups of impressions (four or more) and more elaborate groupings. This may be because of the more fragmentary nature of the recent material: if we had more complete

vessels we might see similar relatively large groupings.

The mark locations and vessel types on which the different marks occur are also roughly similar , as are the fabrics. Where shape could be determined, both open and closed pieces made up about the same percentage in both groups. Rather more open pieces are marked on the base in the 1974-77 material (78% as opposed to 57%) but otherwise the correspondence is very close.

The location of marks is broadly similar in the two groups, except in two cases. More bases were marked in the recent material (48% as opposed to 39%), though the types of marks used were the same. Many of the marks on bases from the 1974-77 group were very small and inconspicuous, and often very worn, which may explain why relatively few were noticed in the earlier excavations. More handles were marked in the group as a whole than in the 1974-77 material (27% to 17%), though in both cases the overwhelming majority of marks were linear.

Almost twice as much Cycladic White was found among the later material, 25% as opposed to 12%, though the same types of marks were used in the same locations. Almost no coarse ware was found in the earlier material, as is to be expected; though as marks on coarse ware formed only 4% of the Renfrew material, it is unlikely that much was missed before.

All of these numbers help to build up a picture of the use

of potters' marks at Phylakopi. Edgar states that the first marks were found in City I, Renfrew's phase B, on "painted geometric ware" (Atkinson et.al. 1904 p.94), but the later excavation produced a few from pre-city levels.

These first marks were almost all linear and located (quite visibly) on the side. Most seem to be on local pieces, indicating that the potters of Phylakopi had begun experimenting with marks by ECII. In phase B, when the pottery found was more domestic (Renfrew 1982c p.223), the use of linear marks continued, but used on the base as well as the side and handle. A new type of mark, oval/round impressions, also makes its appearance, on both base and side. This was the period of nucleation of settlement, as Phylakopi increased its size and presumably importance at the expense of other sites. Perhaps it became necessary to identify pots in some way because in this larger settlement there were more potters and more possibility for confusion.

Phylakopi I was destroyed and Phylakopi II built over it, to the accompaniment of new pottery types: Dark Burnished, of Mainland inspiration (Barber 1987 p.146) and then Cycladic White, which looked more to Crete (Barber forthcoming p.71). However, both use both linear and oval/round marks, mostly on the base. It would appear that the potters of Phylakopi, from wherever their stylistic inspiration came, stuck to their own system of marks no matter what they were making (In some cases the names of

the same Roman potter appears on different types of pottery--see below p.208).

After the destruction of city II, city III was rebuilt on much the same lines. This was the period of great Minoan influence, seen in the use of features such as pillar rooms and frescoes and, of course, Linear A. The pottery types, however, continued apparently uninterrupted, though the styles of shape and decoration became increasingly "Minoanized". Dark Burnished declined gradually into Red Washed and Cycladic White changed to Later Local. The marks continued as well, with oval/round impressions becoming rather more prevalent. The majority of marks from phase D are on the base, though the side and handle are used as well. This continuity of mark types, especially oval/round impressions, which are not found on Crete, as well as the very gradual changes in ceramic type, reinforces the view that the Minoanization of Phylakopi was not so much the result of a direct, physical takeover by Crete as the gradual adoption of ideas from a vigorous and rising culture. (This does not, of course, preclude the possibility of some actual Minoan presence on Melos.) In phase E, as elsewhere in the Aegean, Minoan influence gave way to Mycenaean. The mansion was replaced by the megaron, and the archetypal "Mycenaean" pottery becomes very common. Although this type of pottery was very abundant, none of it was marked in any way. However, there are marks on pieces of other wares from contexts dated to phase E, which must either be leftovers from earlier phases or representatives of a surviving though diminished local

pottery industry. There are a few Cycladic White pieces, and the rest are mostly medium or medium fine. Linear marks are slightly more frequent than oval/round (though area NLc produced only oval/round marks) and there are a few cut/dent marks as well. The base continued to be marked most often, but the handle began to be more popular.

During phase F, roughly the last 250 years of Phylakopi's life, there was a gradual change in the tenor of life on Melos. The fortification wall was strengthened and the shrine built (and re-built). The shrine produced many exotic items, perhaps indicating an increase in travel around the Mycenaean world and its neighbours (though few Melian exports of this period are known). Settlements elsewhere on Melos re-appear. Perhaps Phylakopi had become too crowded, or too large for the immediately available land to support. It has been suggested as well that the introduction of the donkey around this time made the movement of people and goods easier, and so encouraged the development of new settlements which would not be so isolated from the facilities at Phylakopi.

During LHIII B2, disruptions on the mainland led to a weakening of the domination of "Mycenaean" pottery, and new local styles developed. At Phylakopi there were slightly more marks than in the previous phase (38 as opposed to 26). Oval marks have almost disappeared, and the linear marks are generally very simple (Though in

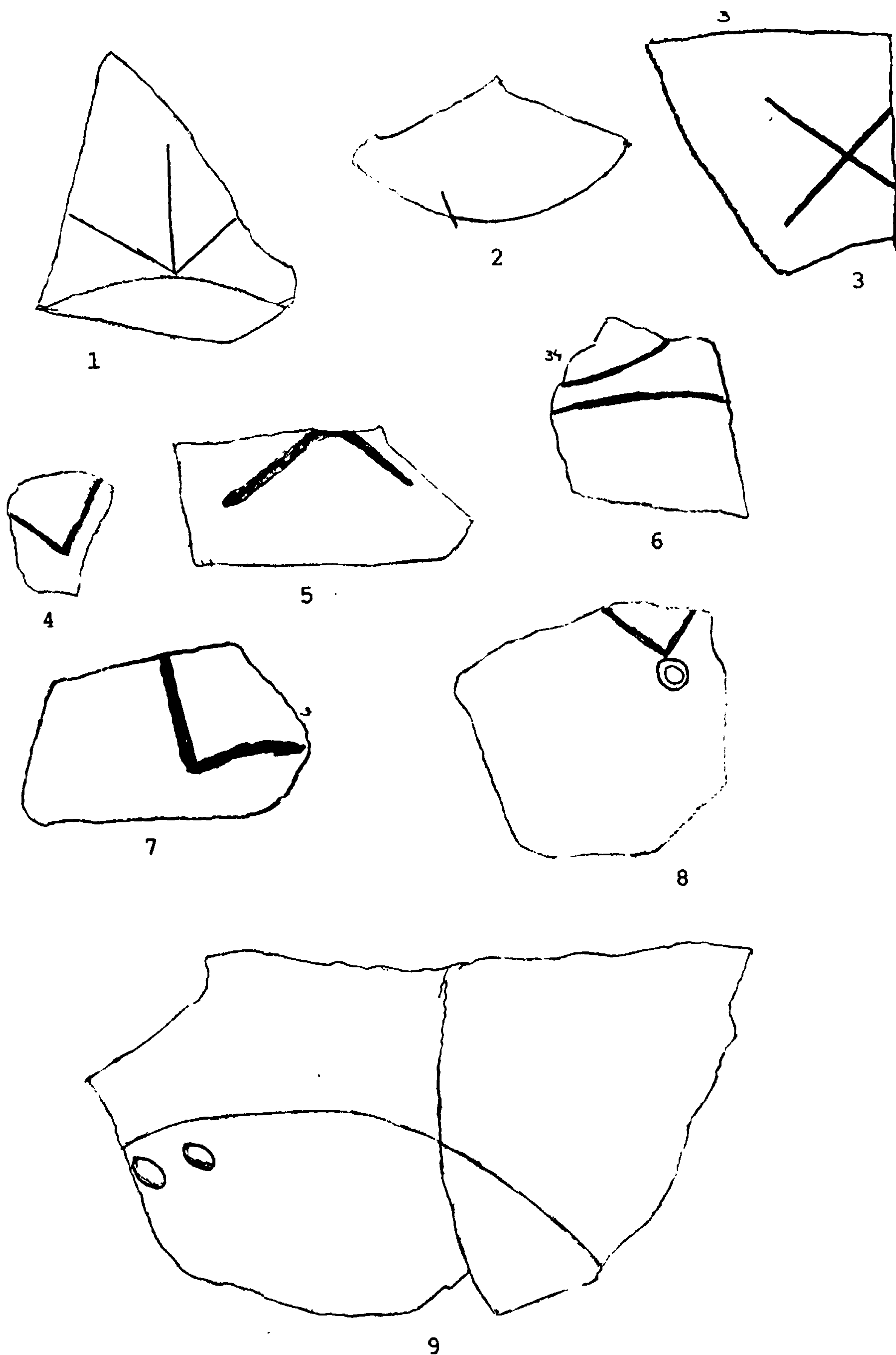
general the linear marks were always simple, some were rather more elaborate and these all appeared earlier.). Few pieces are marked on the base and these are mostly Cycladic White and presumably holdovers from an earlier period. The side and handle are more common.

The picture at Phylakopi seems to indicate that the use of potters' marks began in late EH. The first pieces are marked on the side, but soon the Phylakopi potters began to use the base more often. This may indicate a difference in function: marks on the base are less likely to indicate contents, for instance, as they are not so readily visible. The use of oval/round impressions seems to be a local development which grew gradually more popular. They maintained their position really until the beginning of Mycenaean influence. During phases E and F linear marks become more popular and shift to the side and handle. The increase in linear marks could be seen as a result of the use of linear B, were it not for the fact that these marks are less elaborate than their predecessors. There could be a number of reasons for this change in position. Perhaps during the Mycenaean "takeover" of the ceramic industry the potters of Phylakopi forgot the old system of marking, and invented a new one when they regained some control of the manufacturing process as Mycenaean power waned. Another possibility is that under the Mycenaean system it was no longer necessary to identify the potter or workshop, and so marks were used more to denote contents. In any case, it is clear that the Mycenaean inspired changes in the pottery industry also had some disruptive effects on

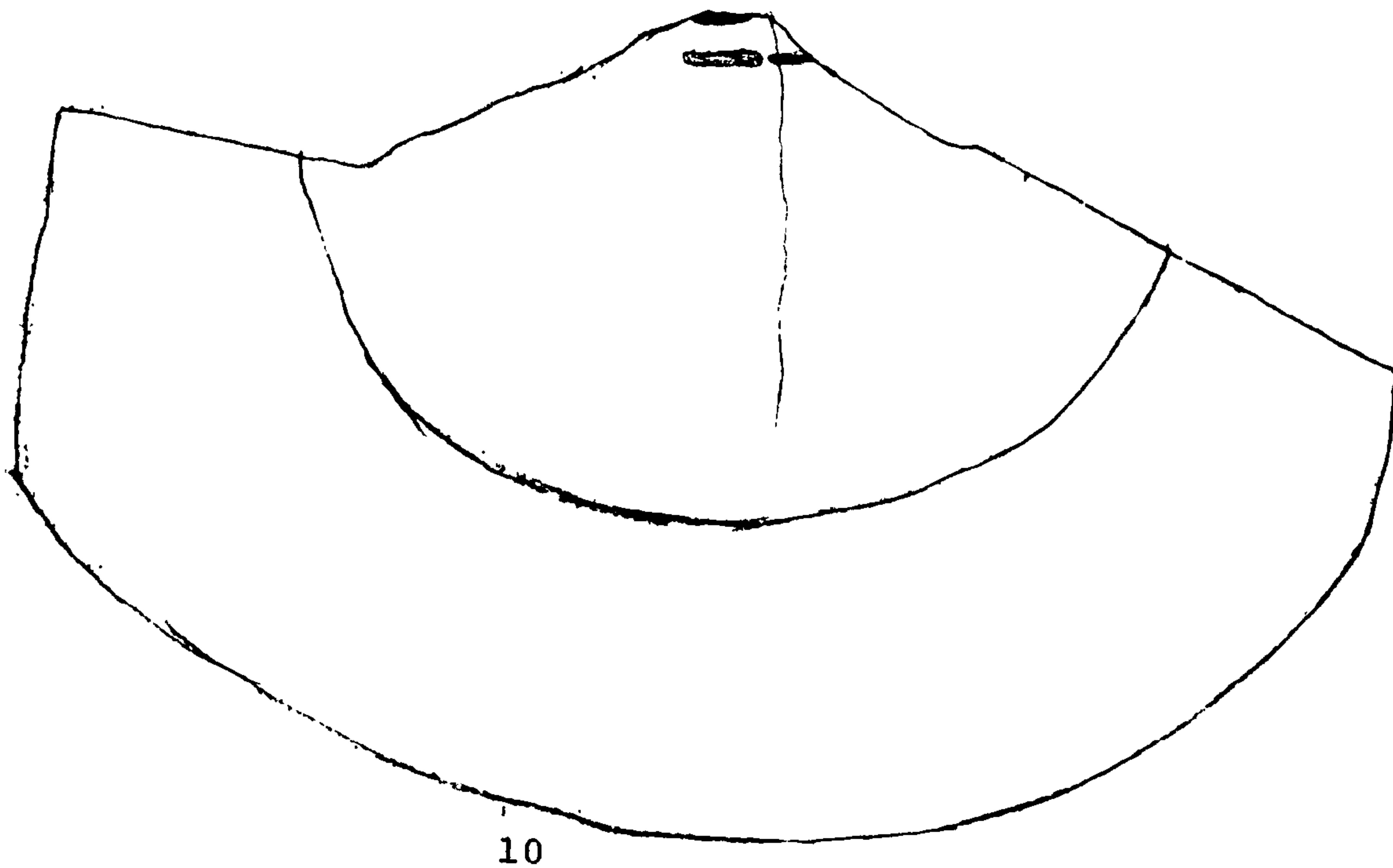
the marking system.

It is interesting that none of the fine, buff, mass produced Mycenaean pottery was marked, and indeed I have not found marks on that type of ware from any site I studied. Presumably it was manufactured on such a scale that individual potters had no control over the contents, customer, destination or any other aspect of the process which might require some notation. It is probably no co-incidence that this type of pottery was produced by a highly organised and centralised palace society with a sophisticated record keeping system: presumably any information about the pottery was being recorded in Linear B elsewhere.

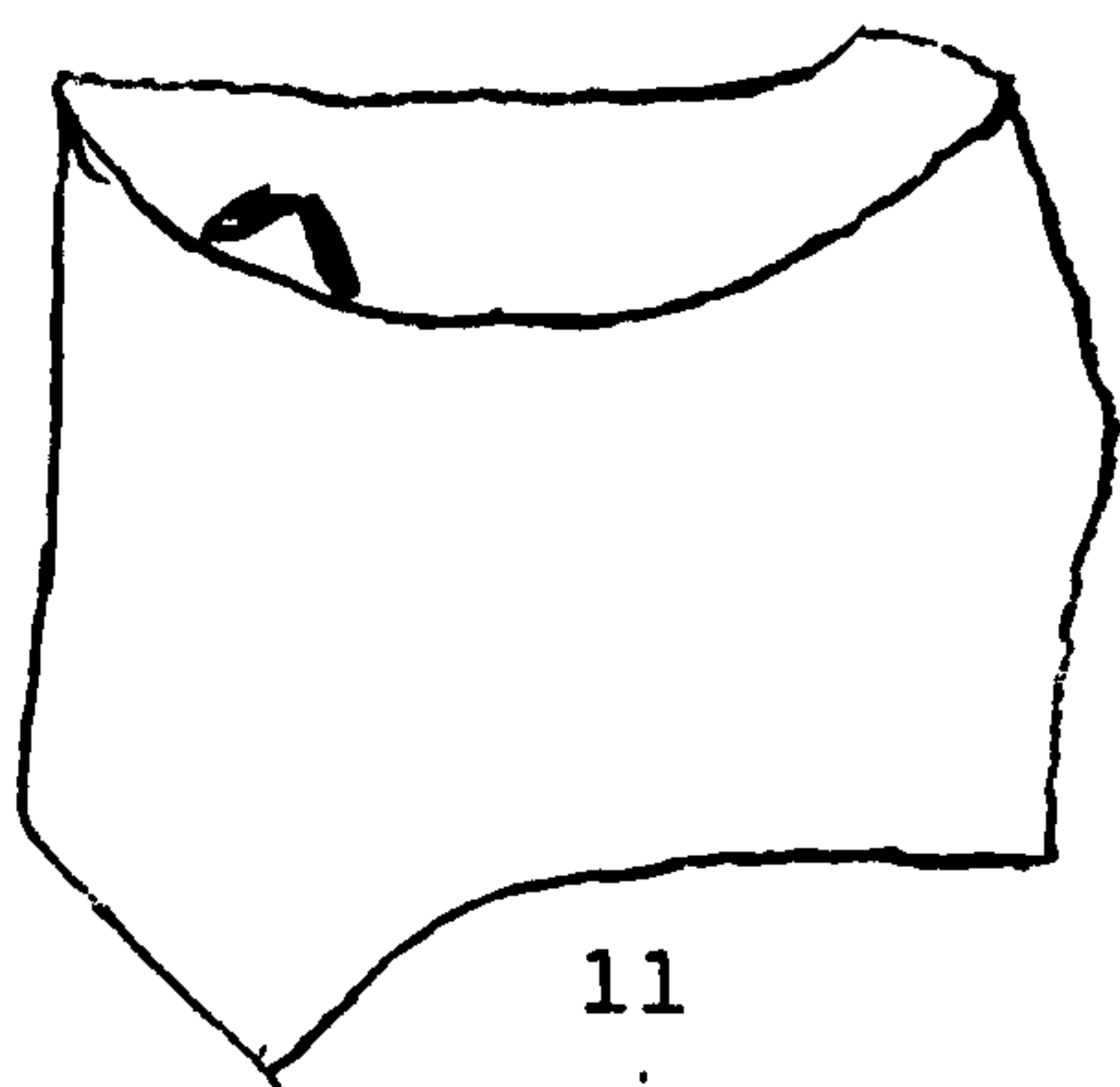
Despite the great influx of Mycenaean pottery and consequent decline in the local industry, the potters of Phylakopi seem to have continued with their own system of marks, albeit on a reduced scale.



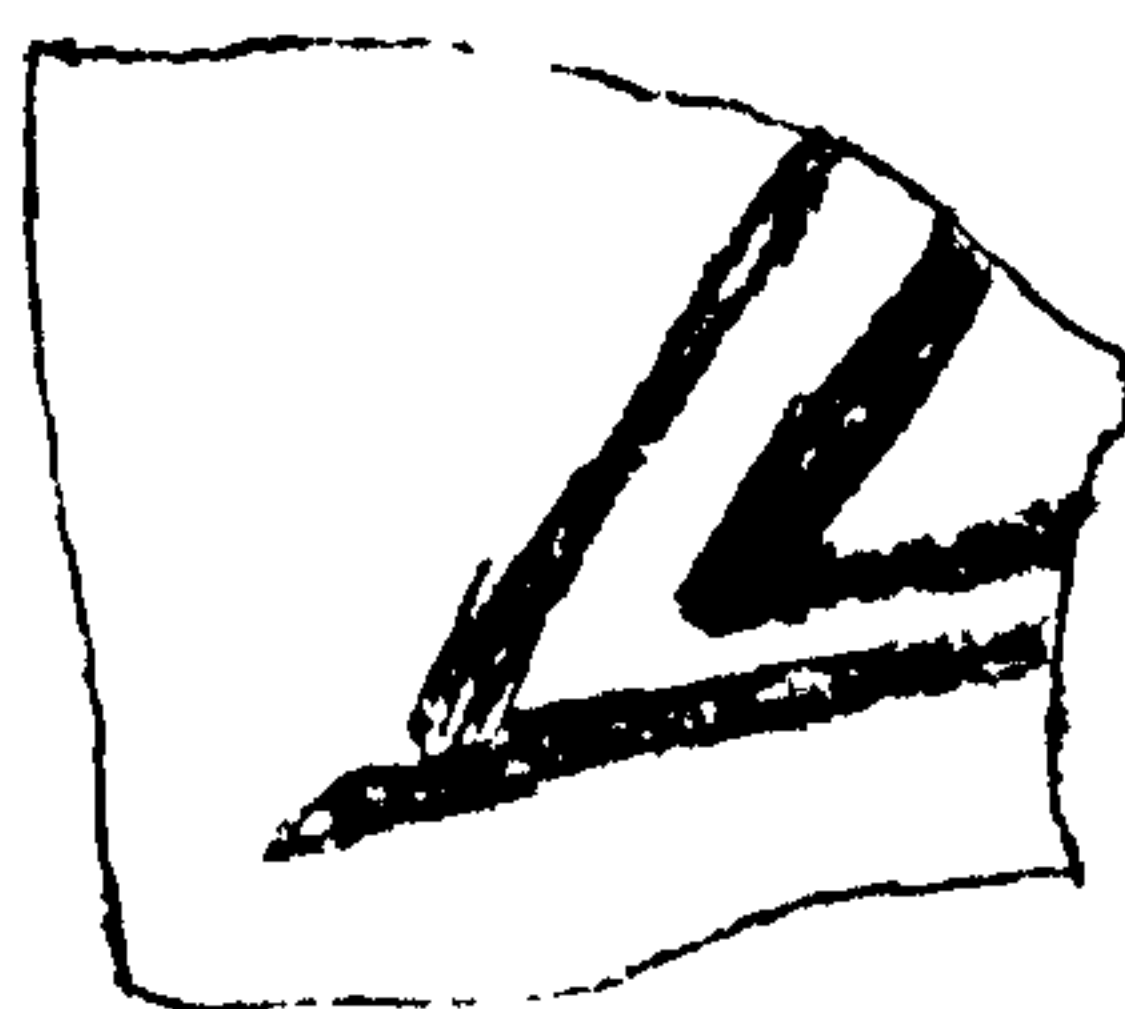
13. Phylakopi 1974-77 1-9. Scale 1:1



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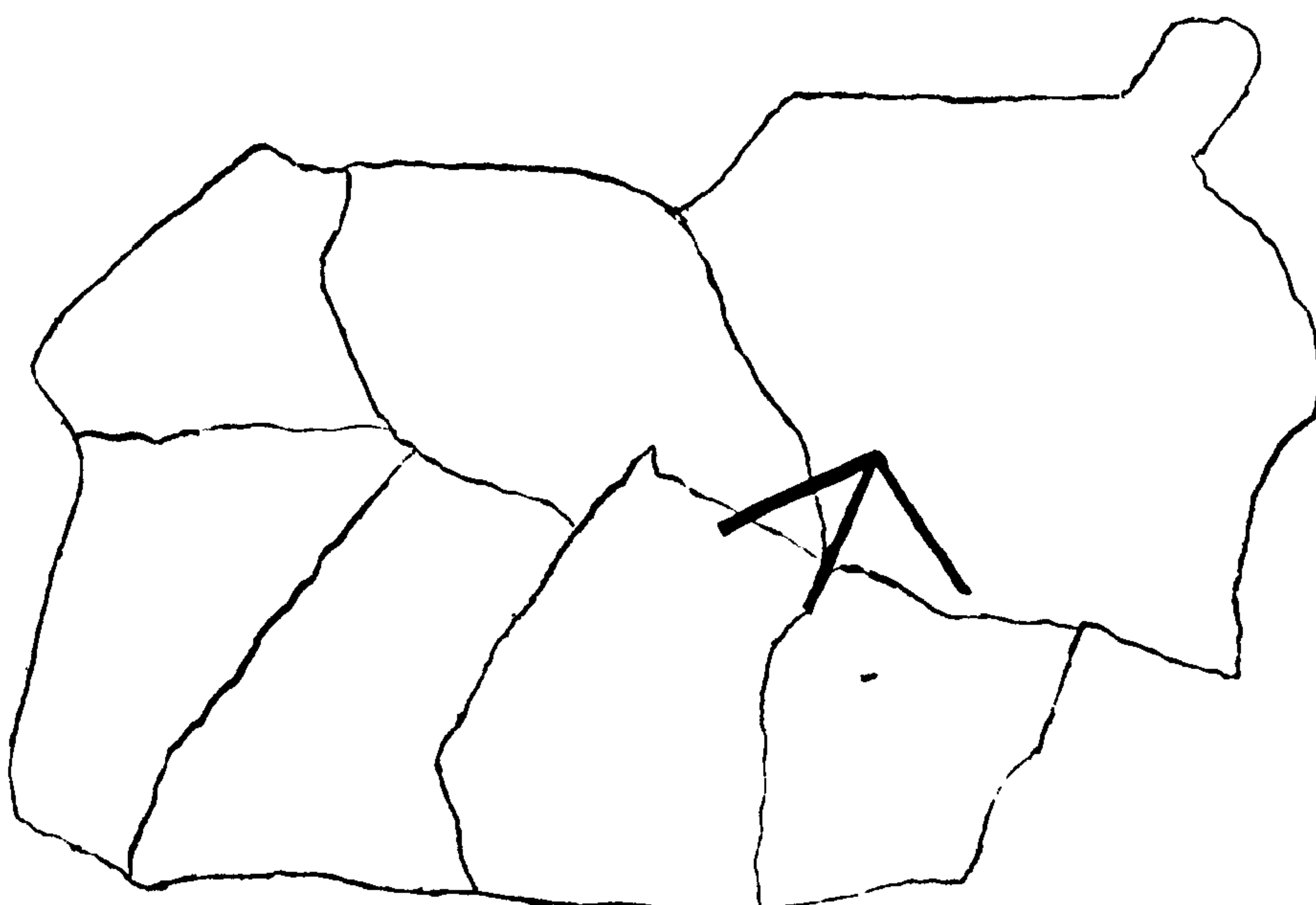
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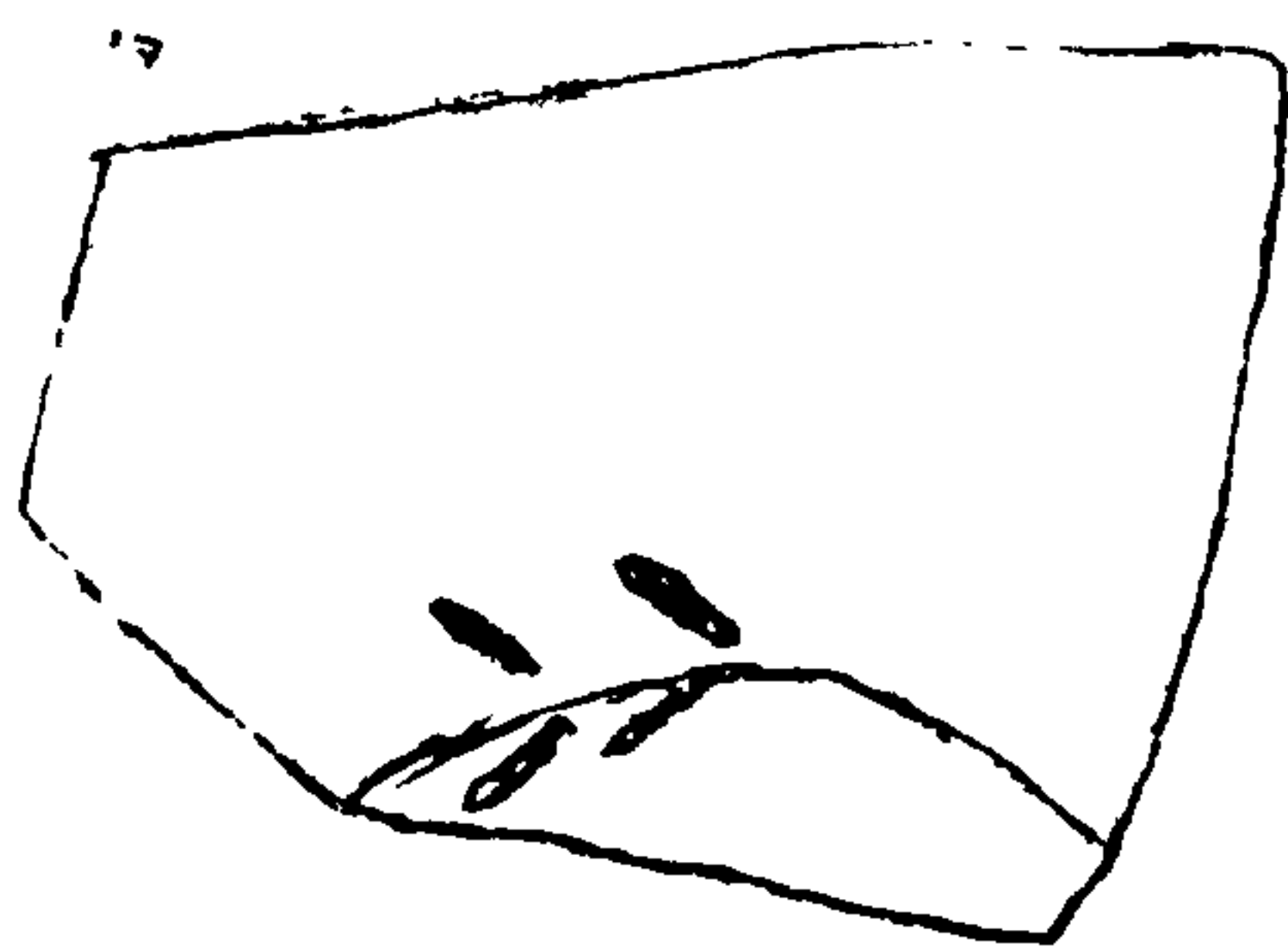
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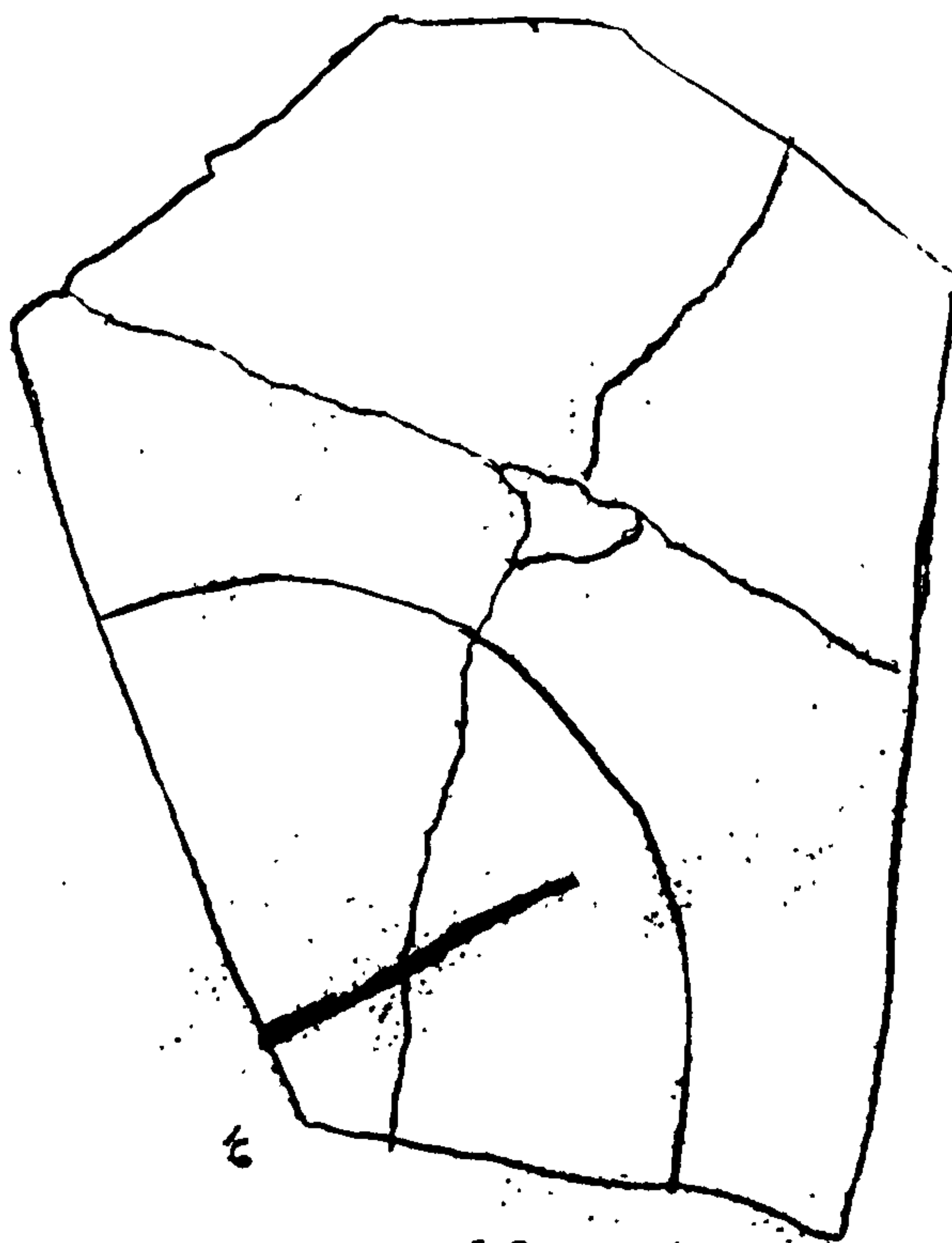
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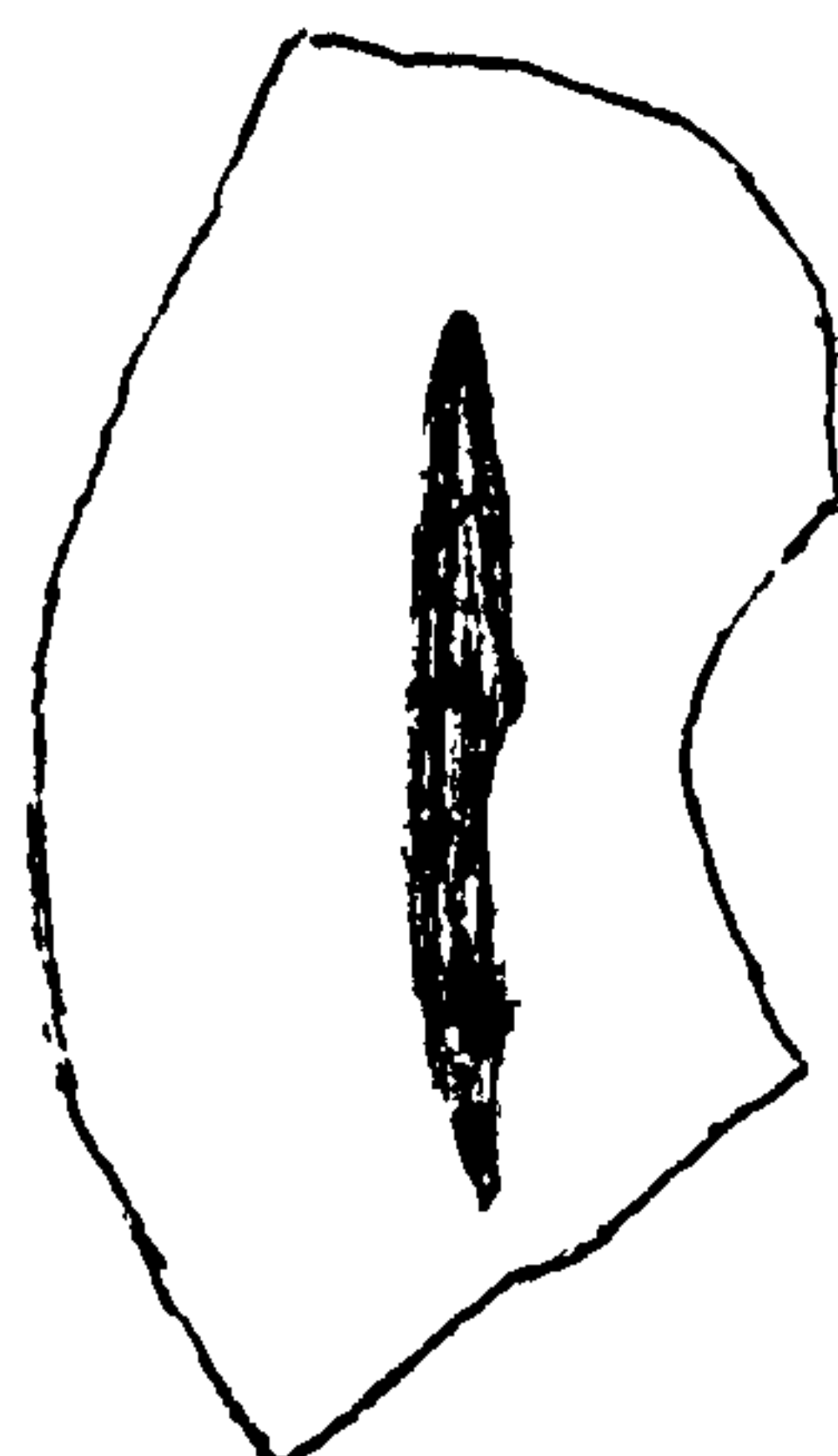
14. Phyakopi 1974-77 10-14.¹⁴ Scale 1:1



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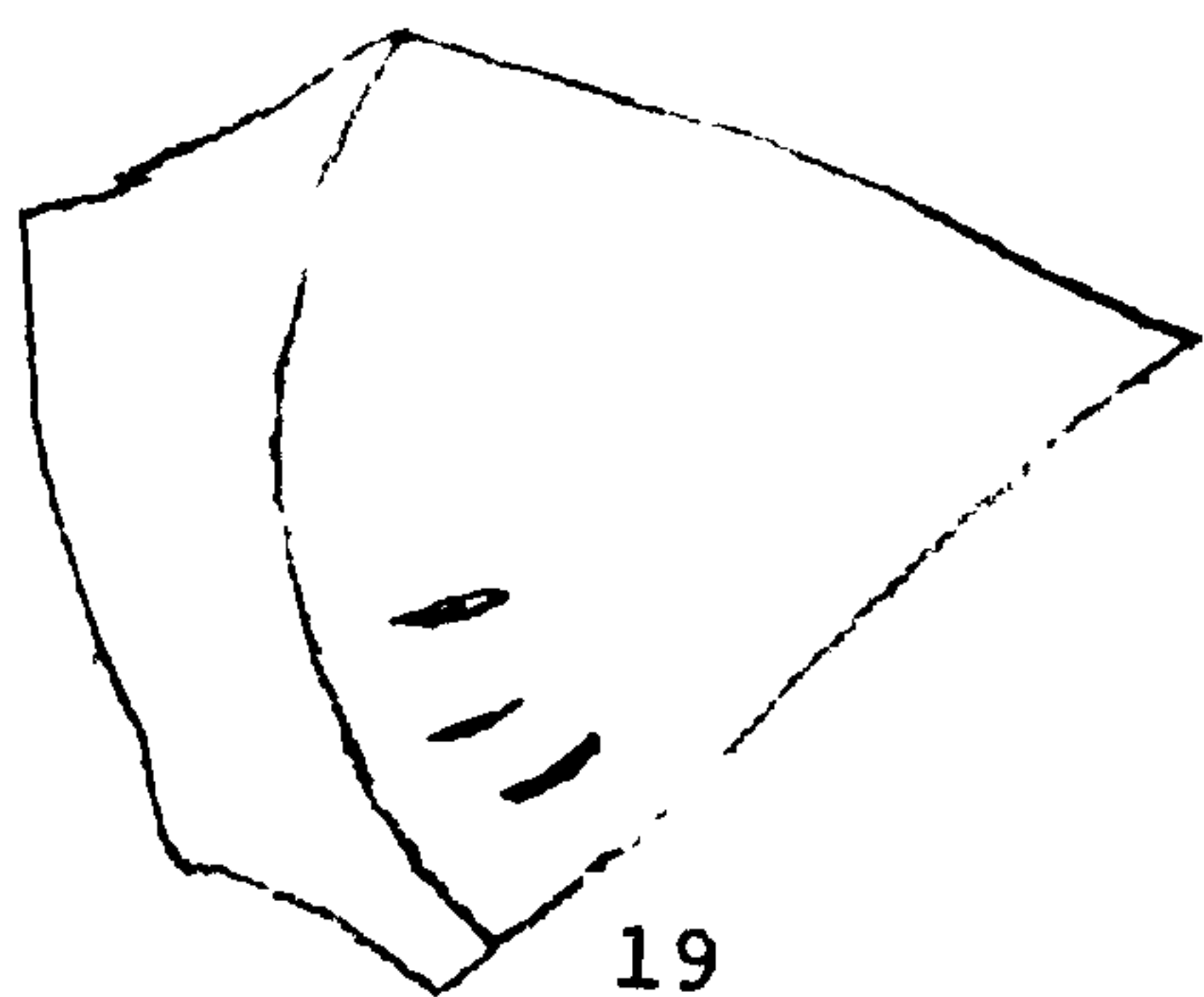


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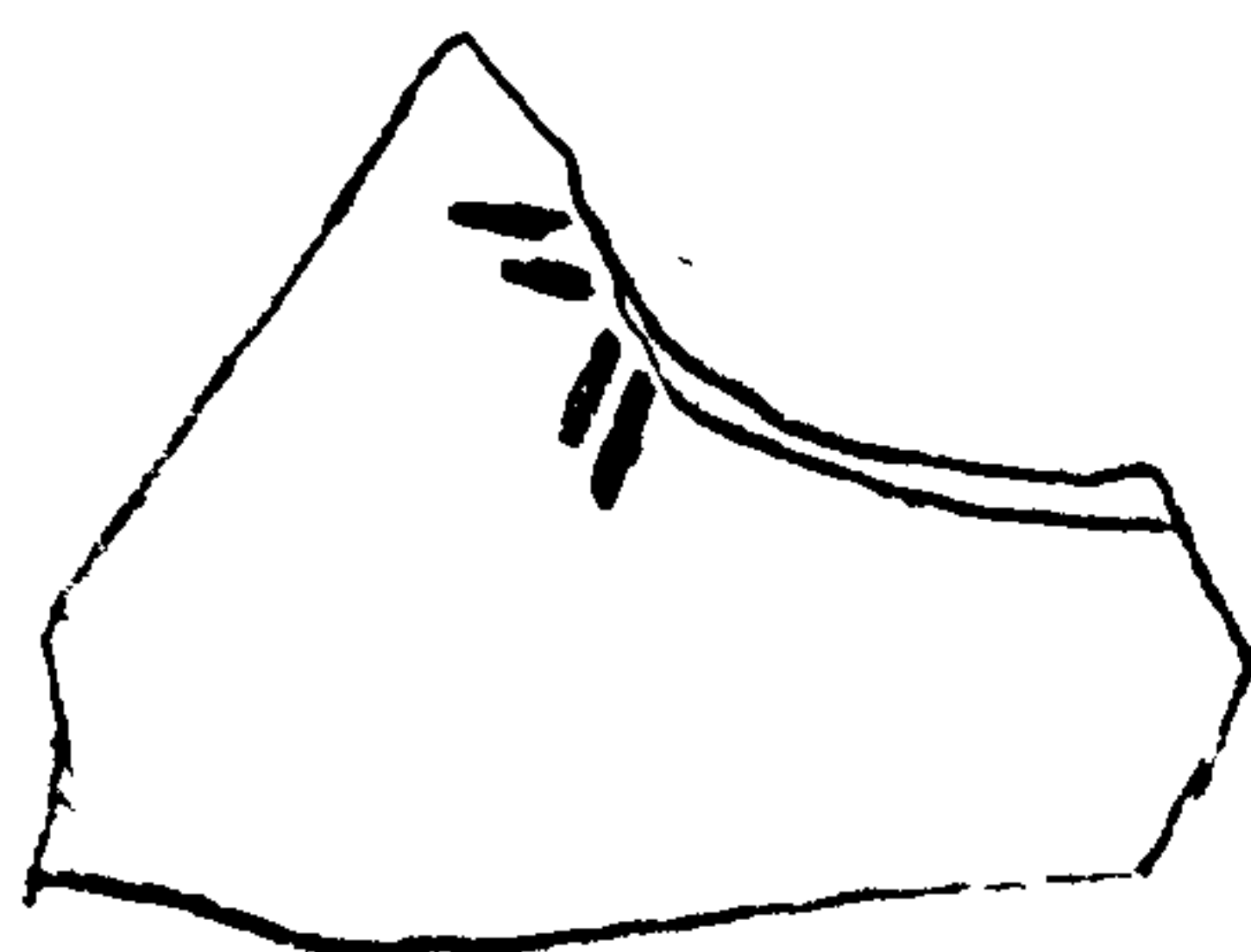


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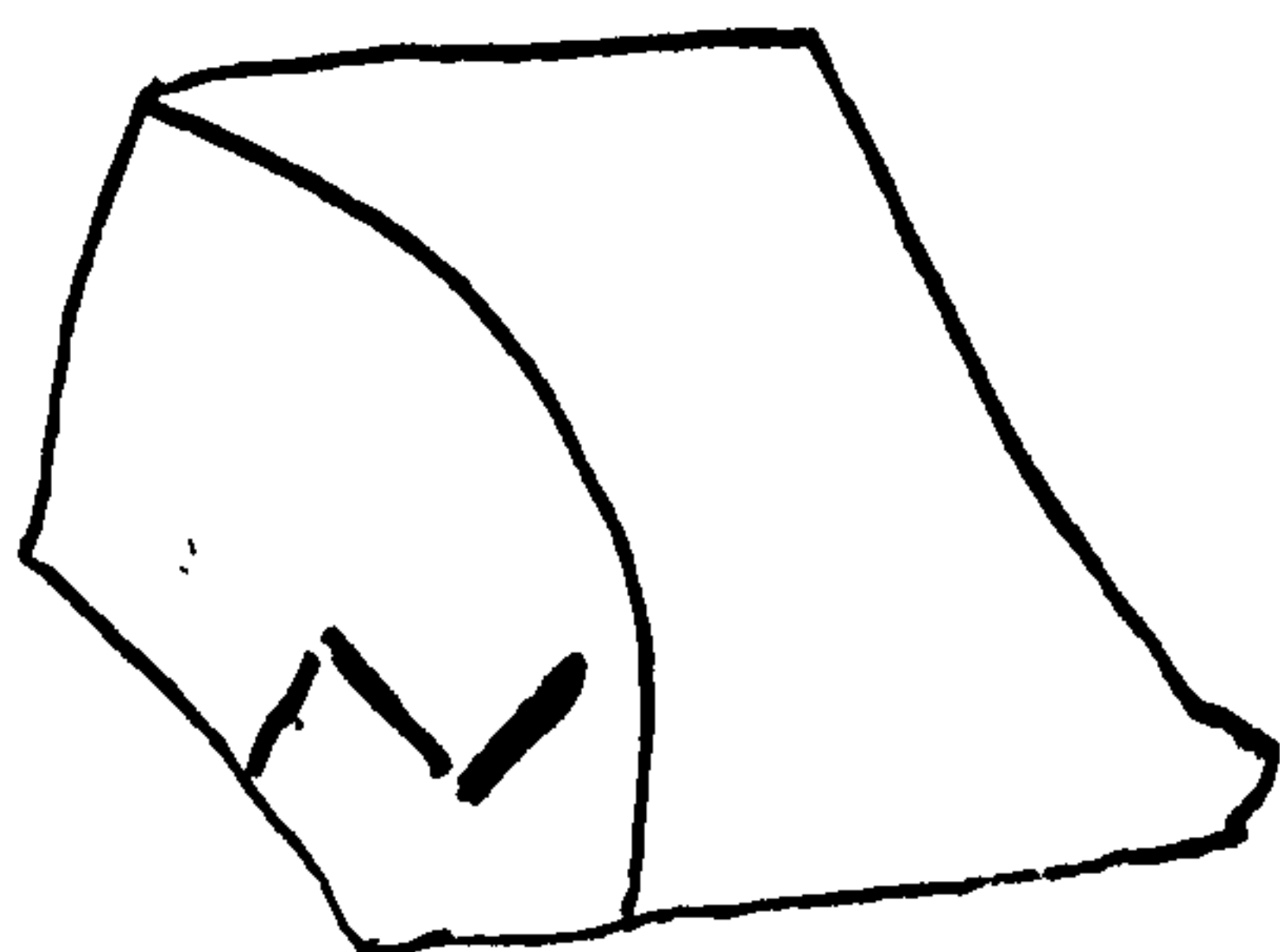
15. Phylakopi 1974-77 15-18. Scale 1:1



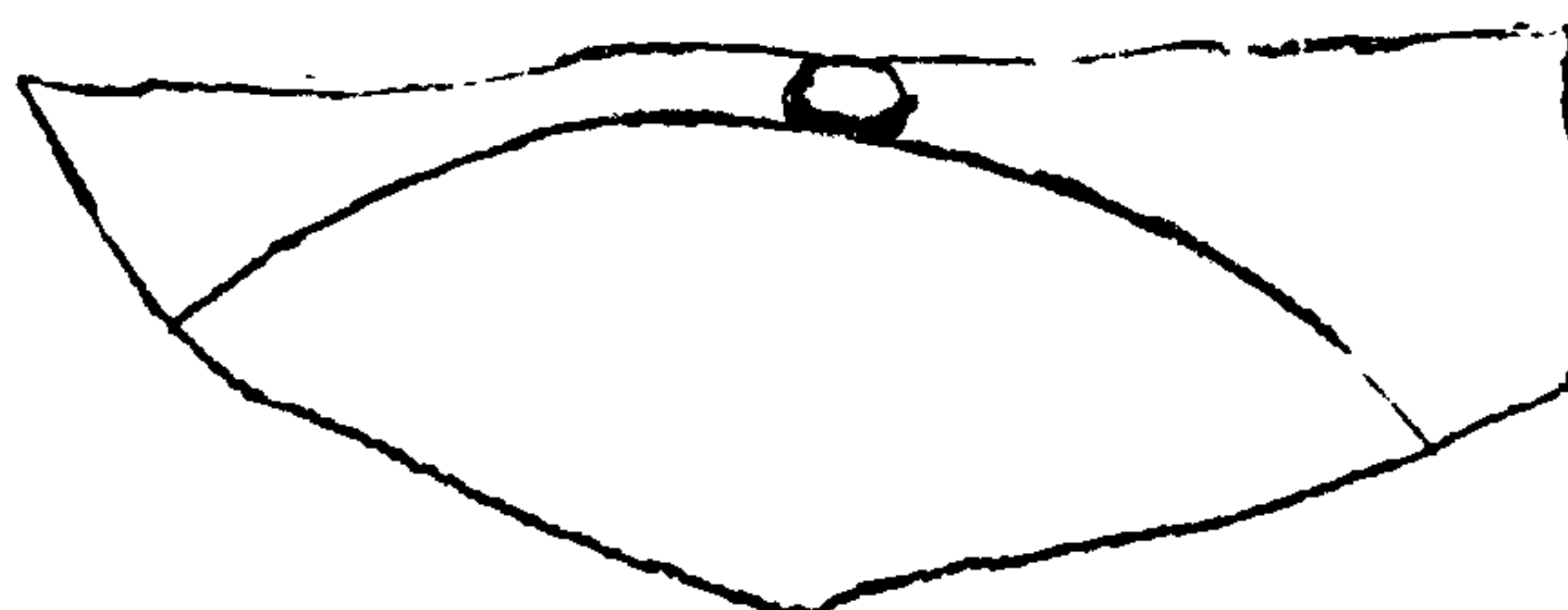
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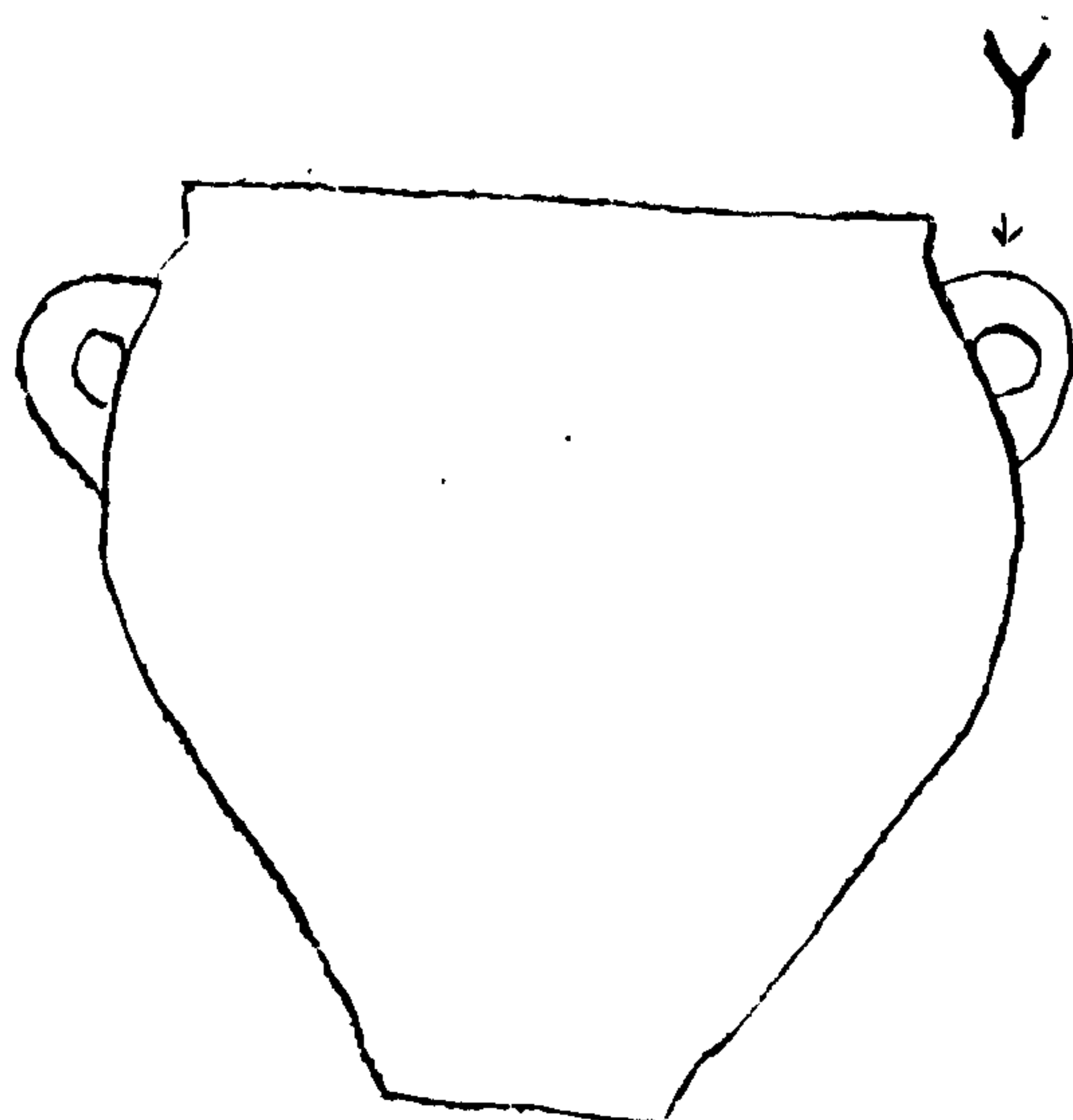
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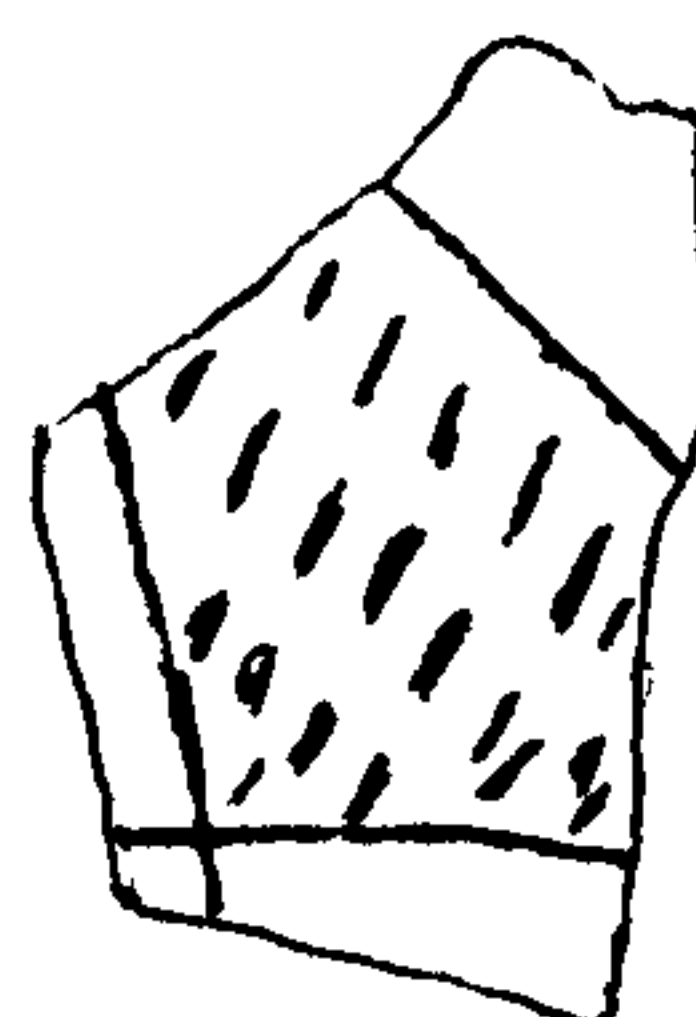
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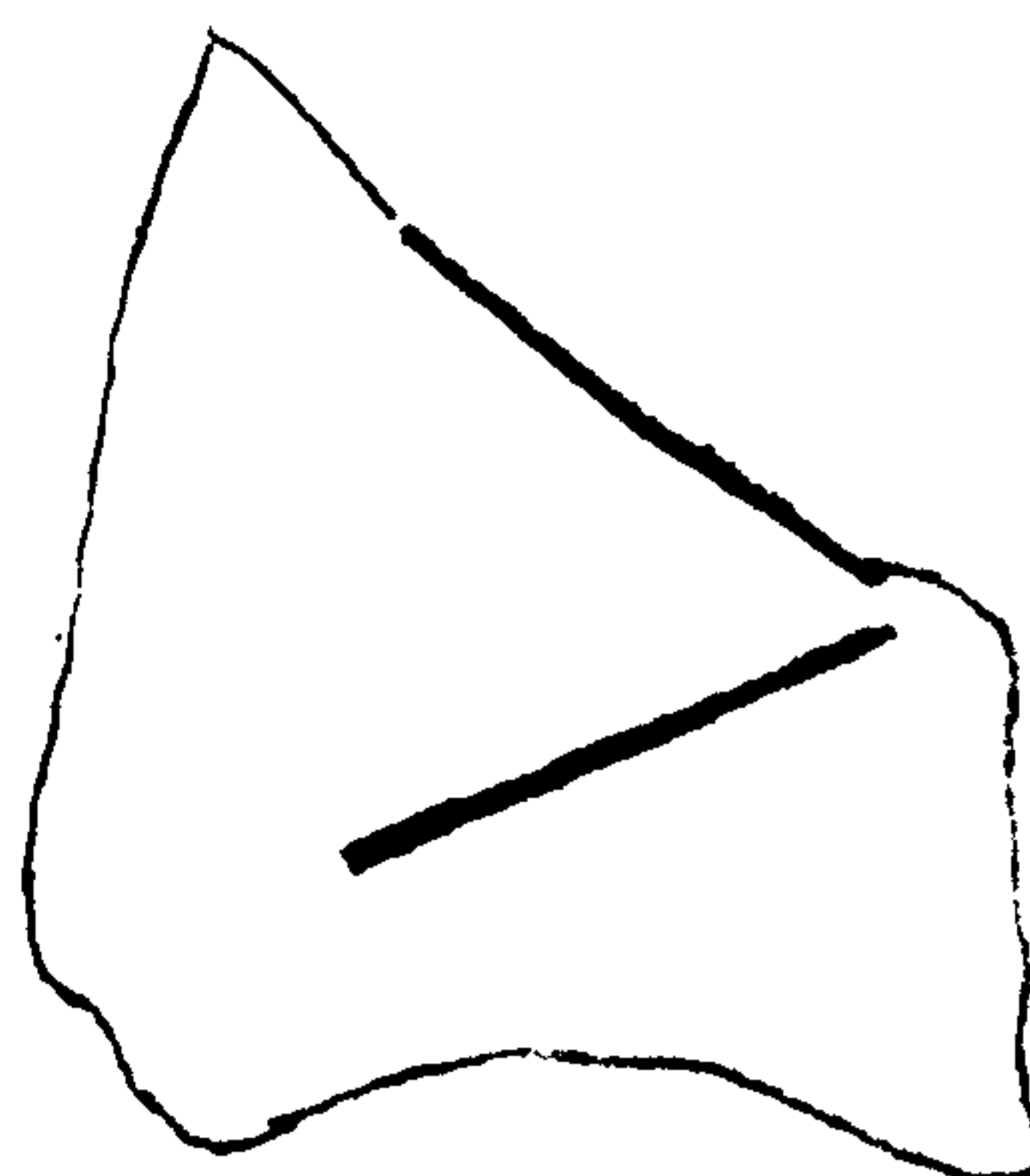
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23 1:5

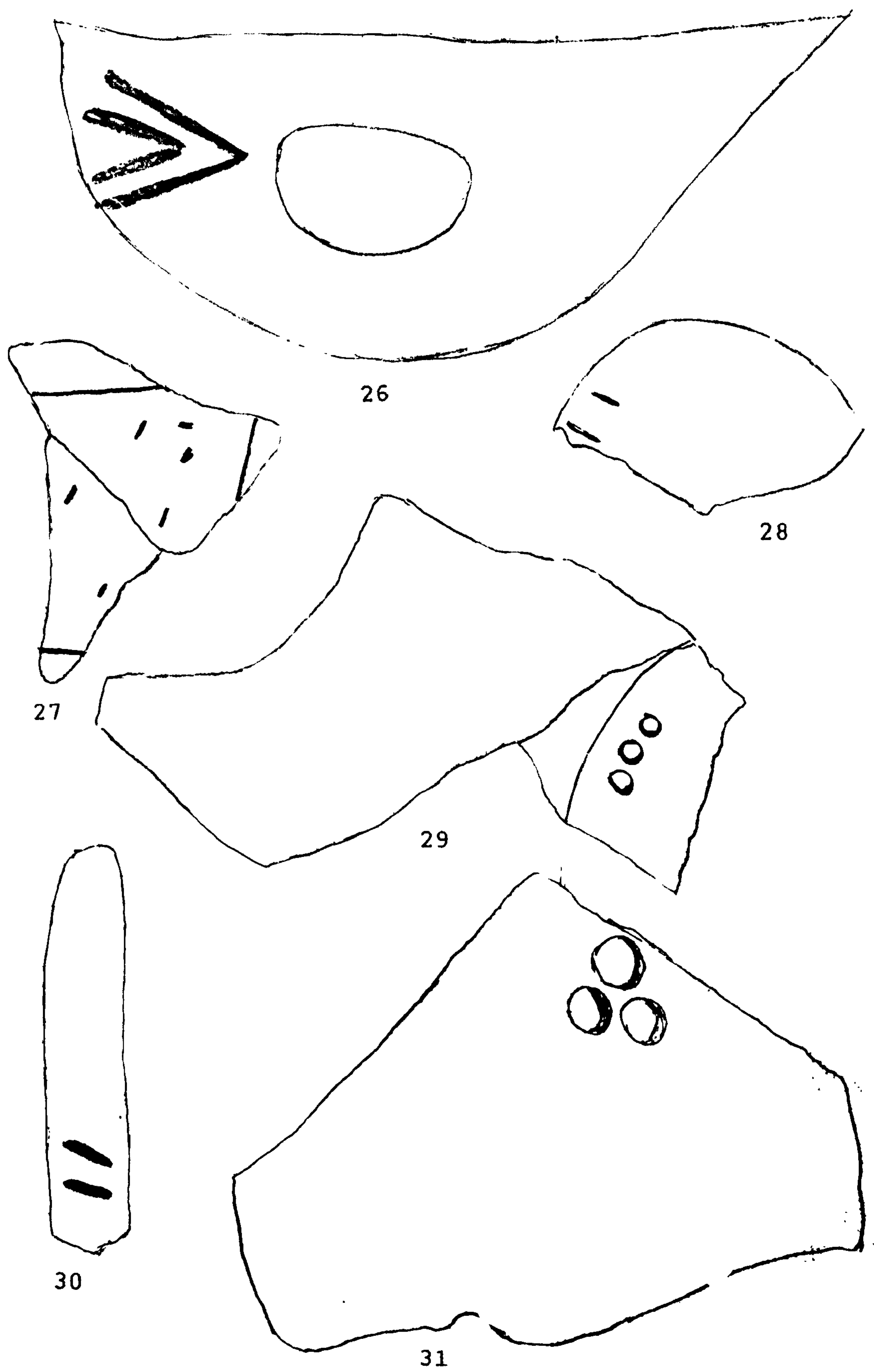


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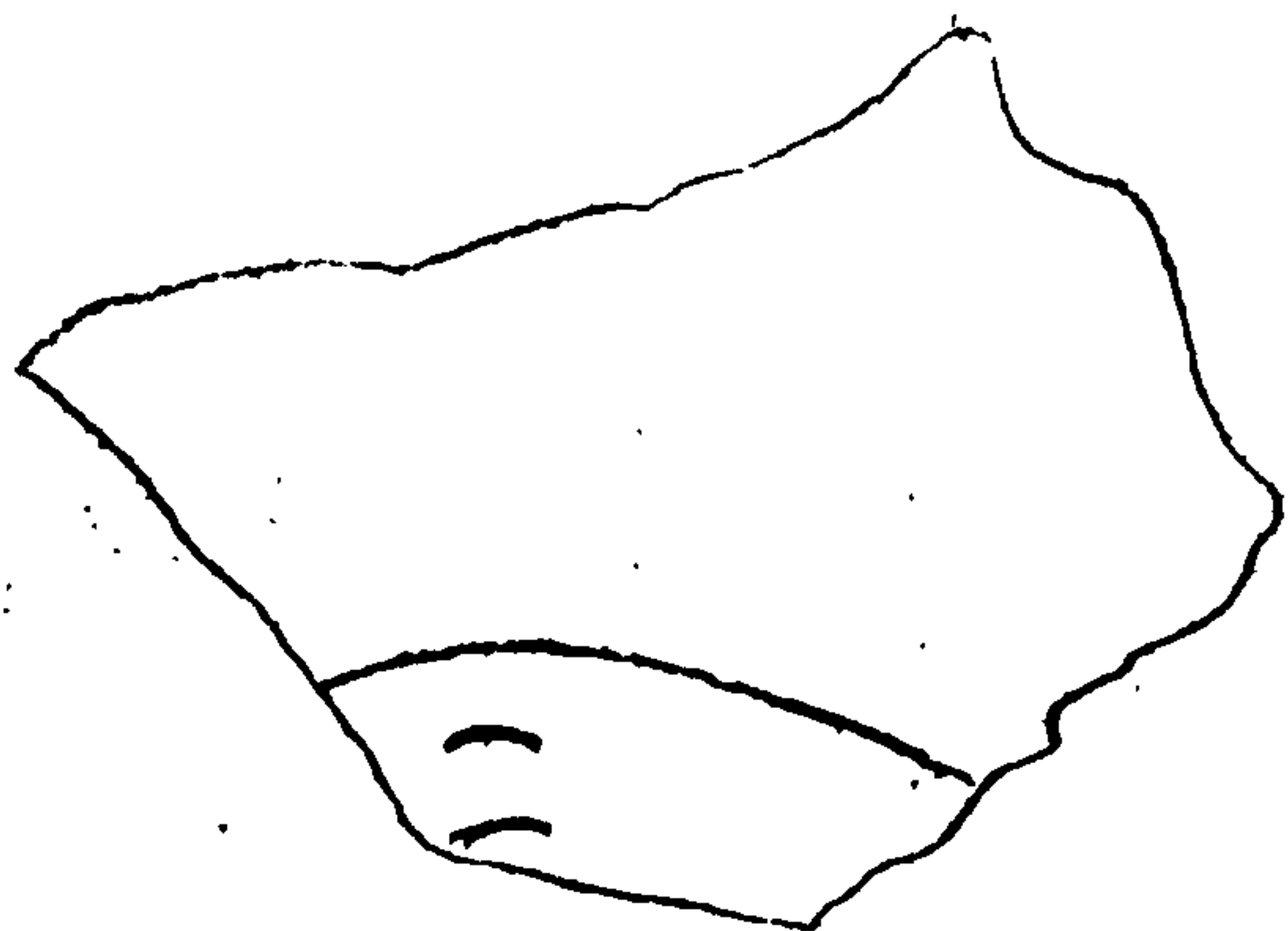


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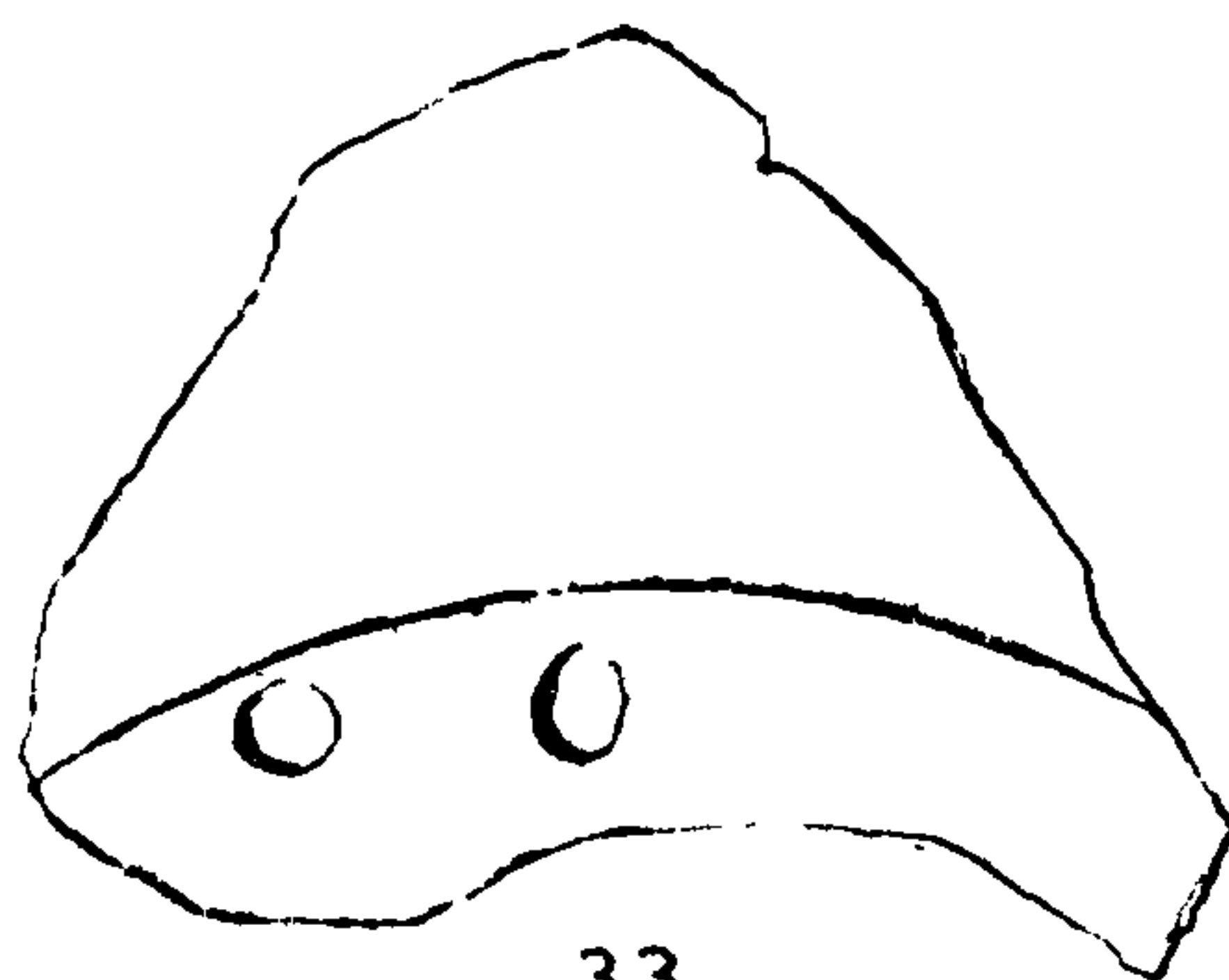
16. Phylakopi 1974-77 19-25. Scale 1:1, except 23, 1:5



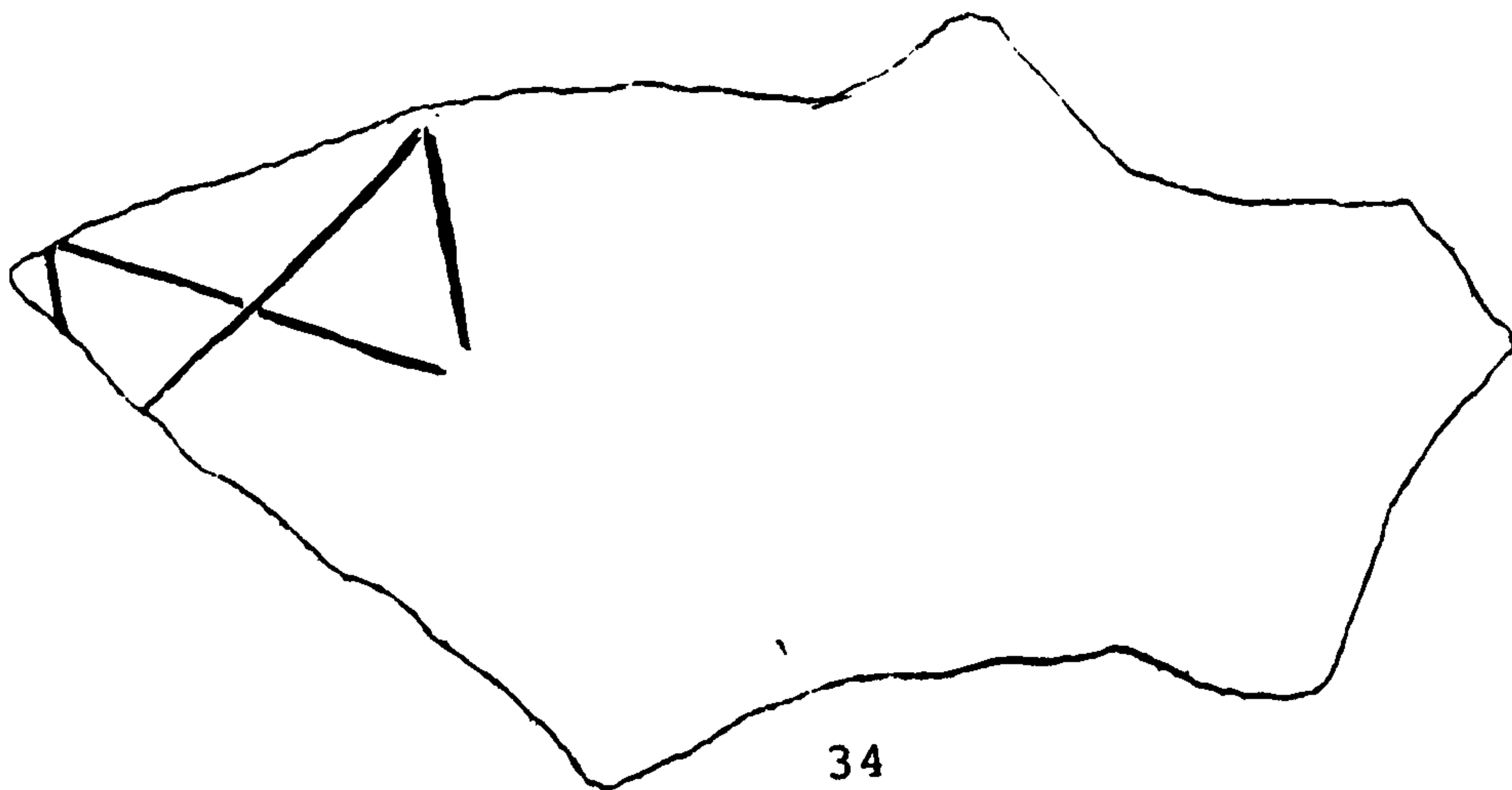
17. Phylakopi 1974-77 26-31. Scale 1:1



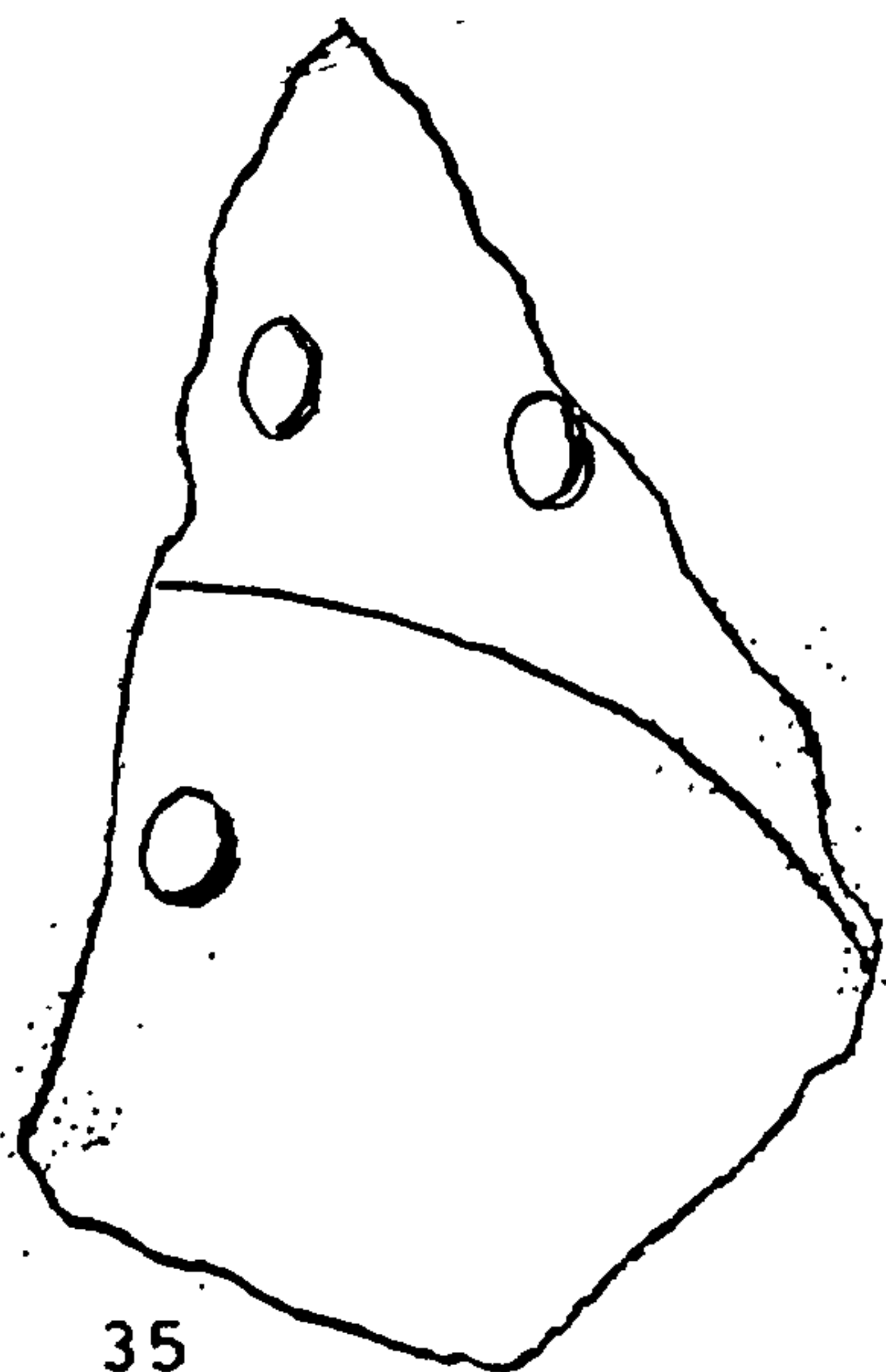
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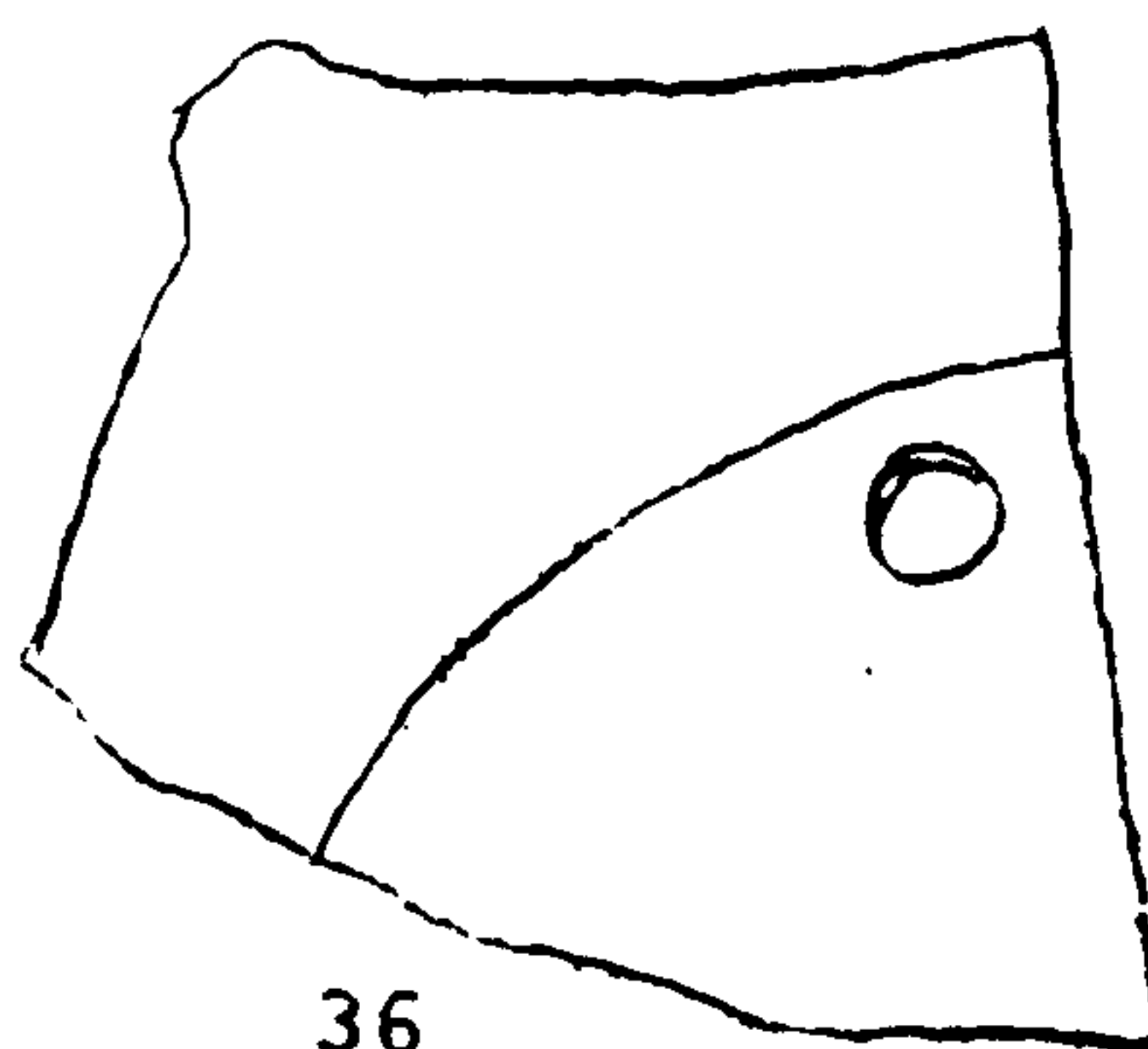
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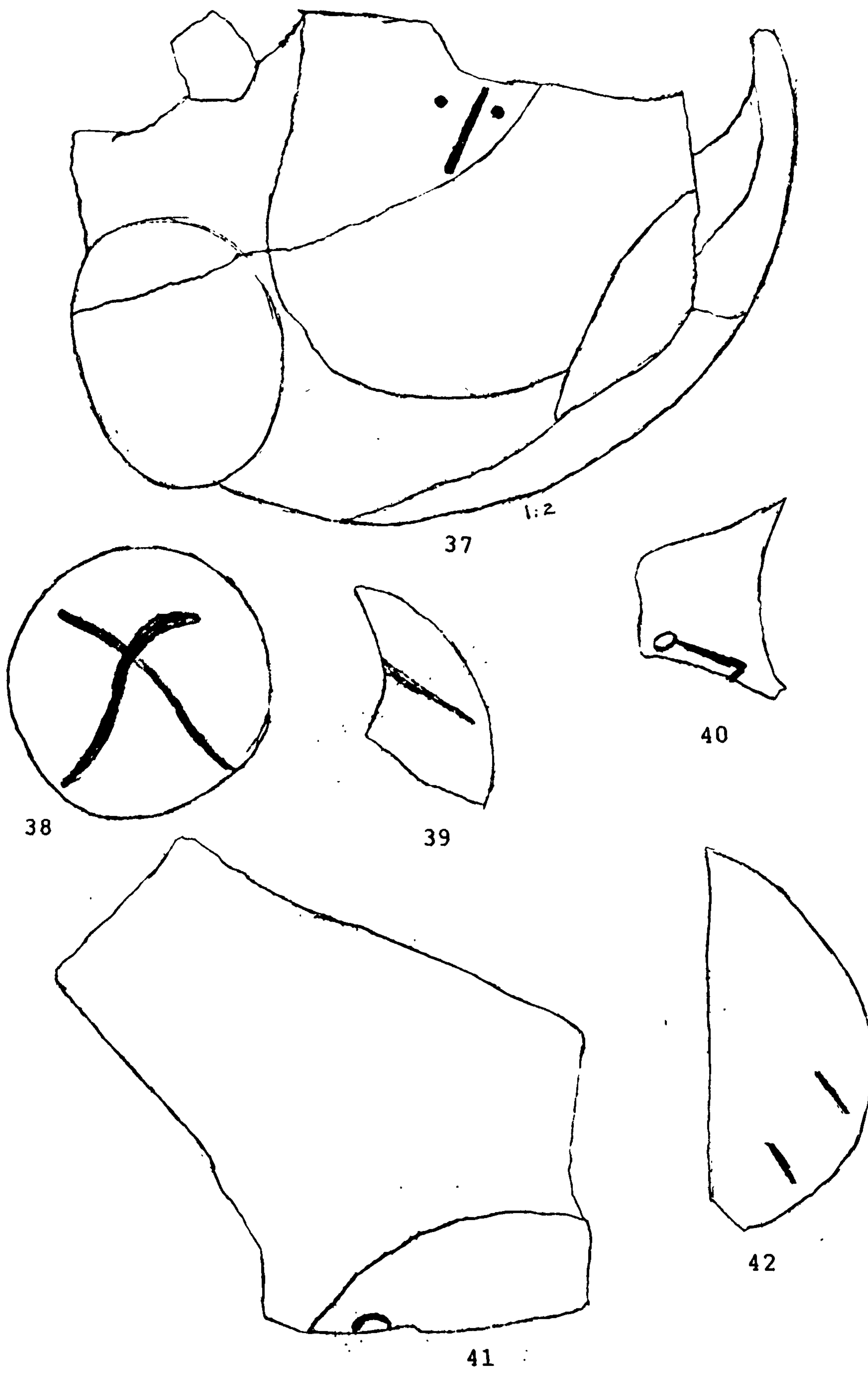


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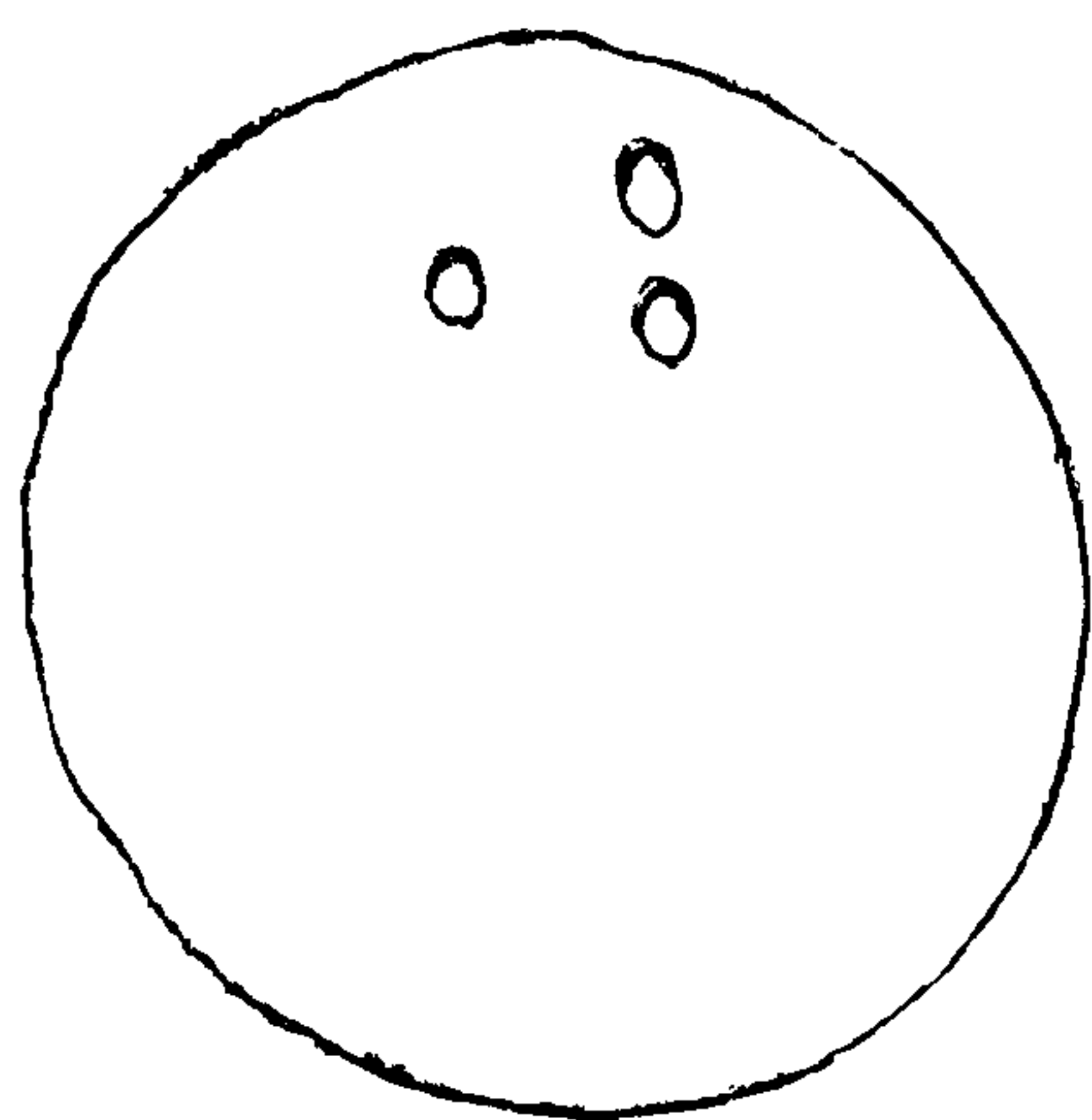


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18. Phylakopi 1974-77 32-36. Scale 1:1



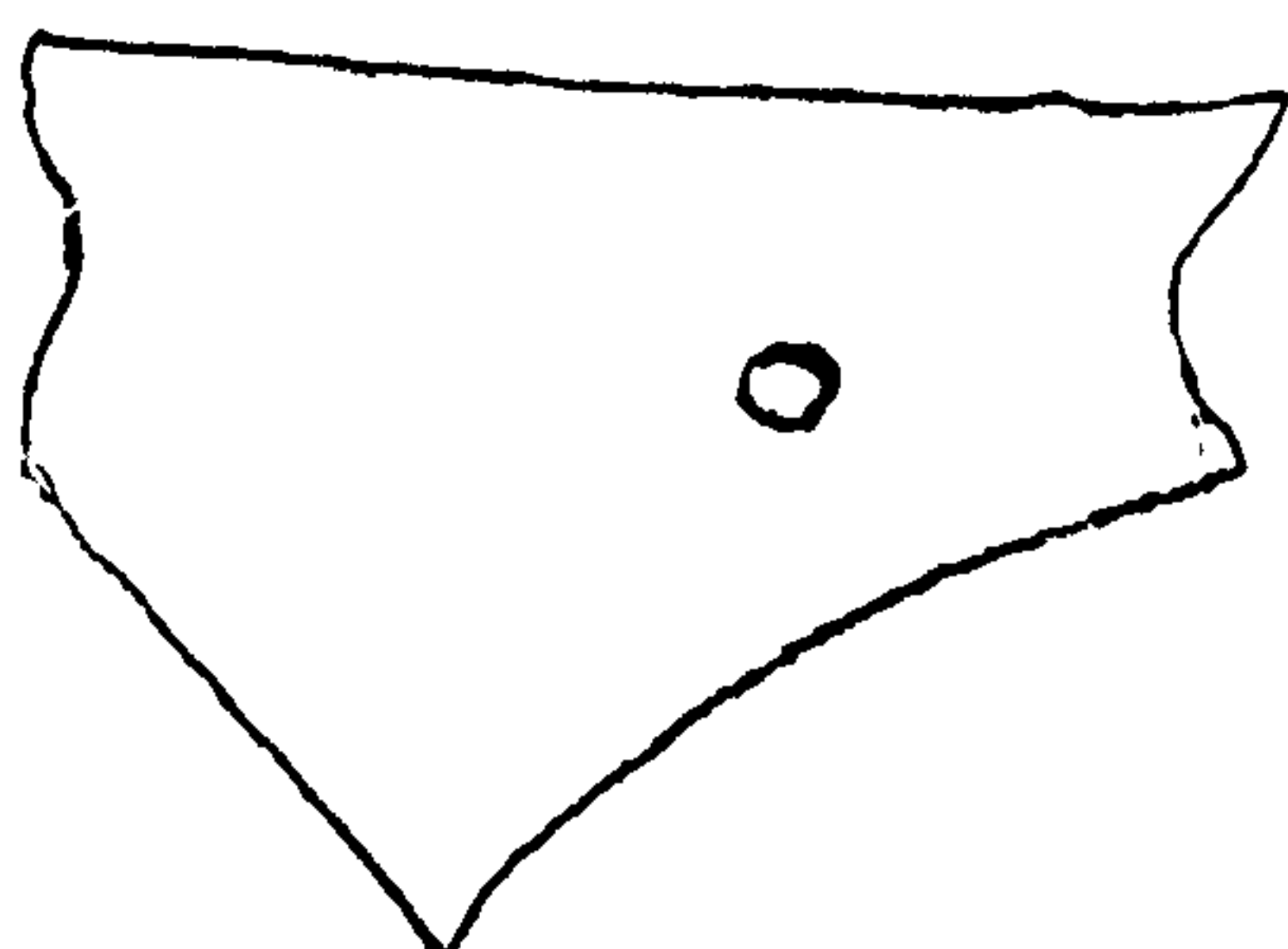
19. Phylakopi 1974-77 37-42. Scale 1:1, except 37, 1:2



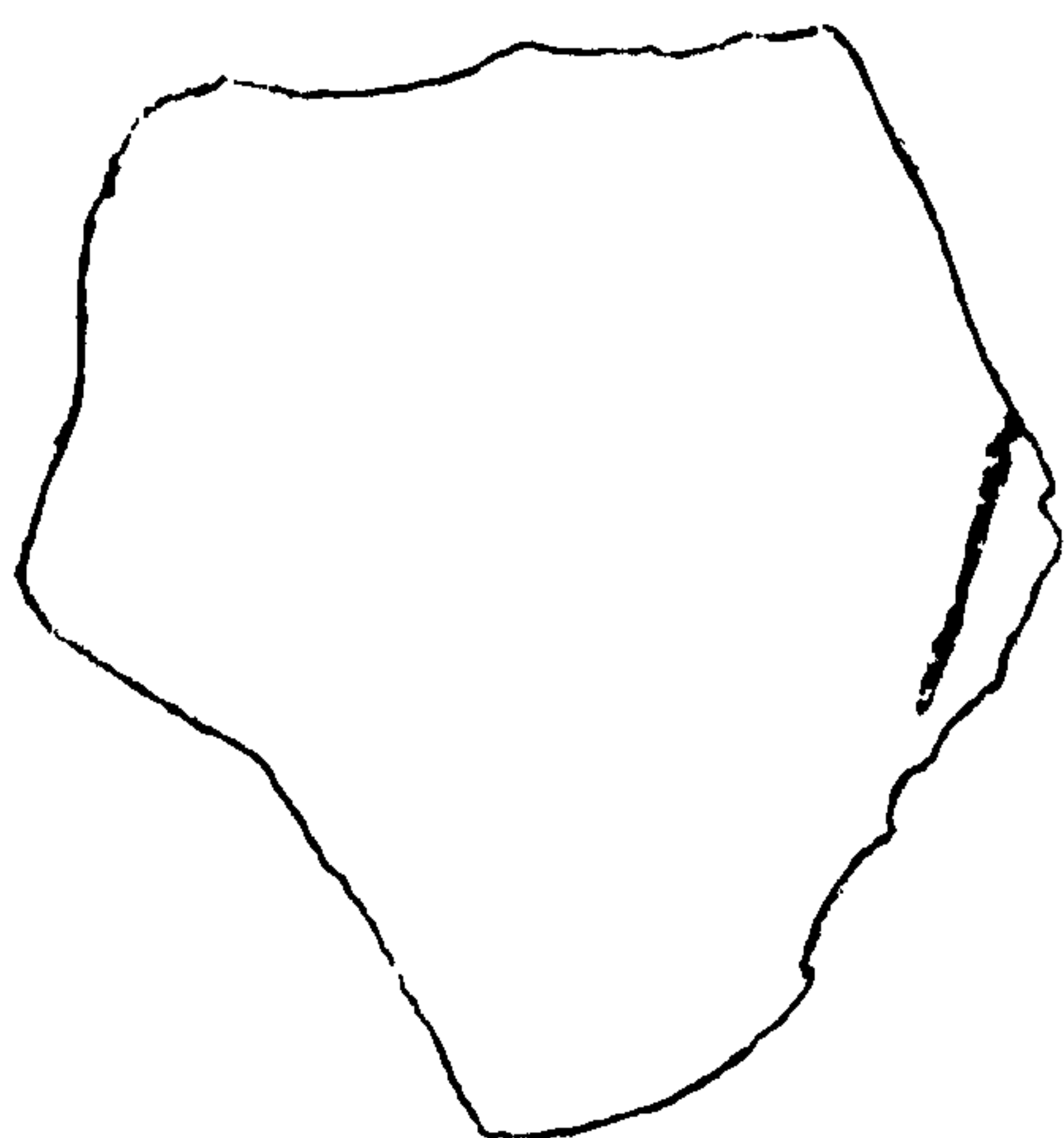
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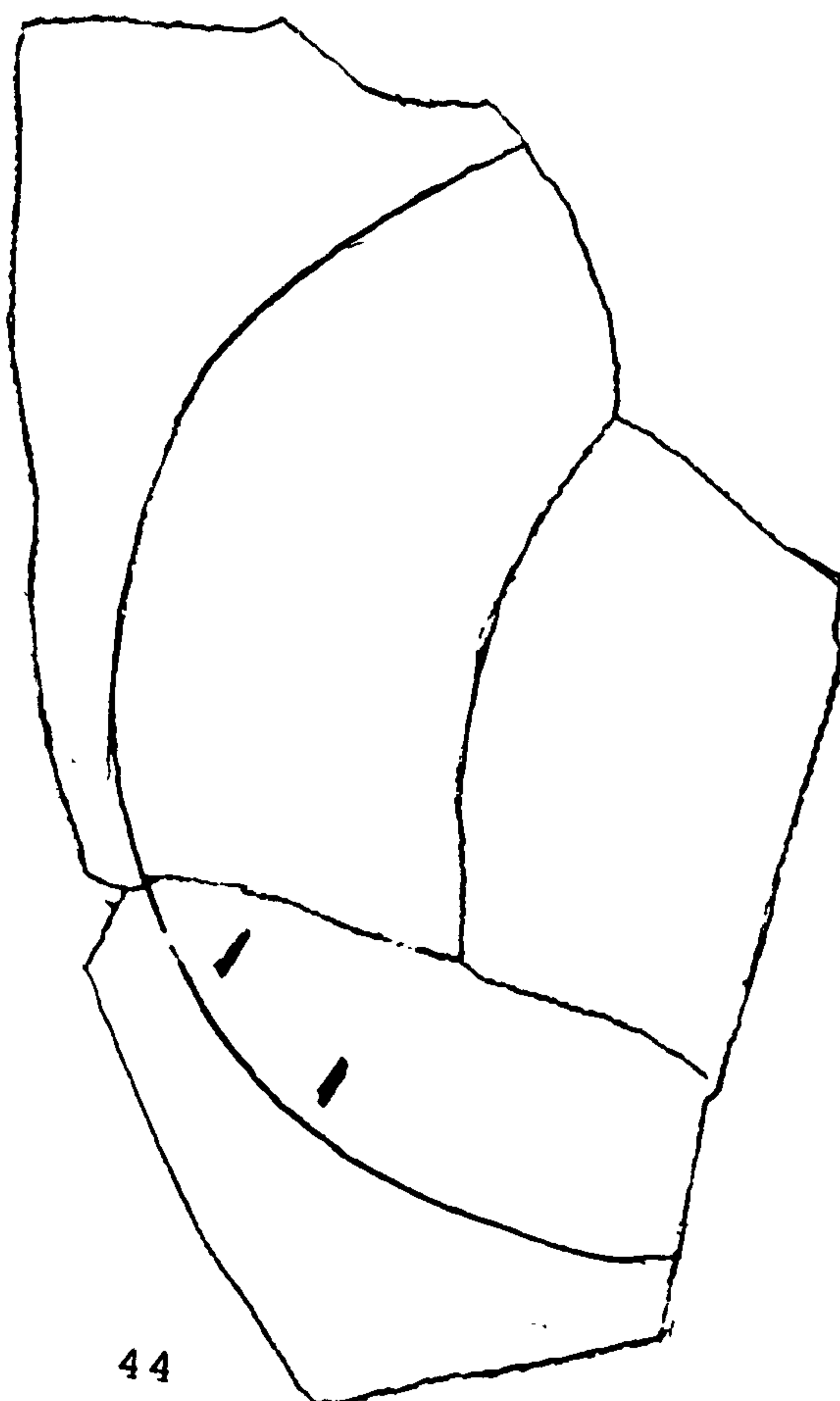
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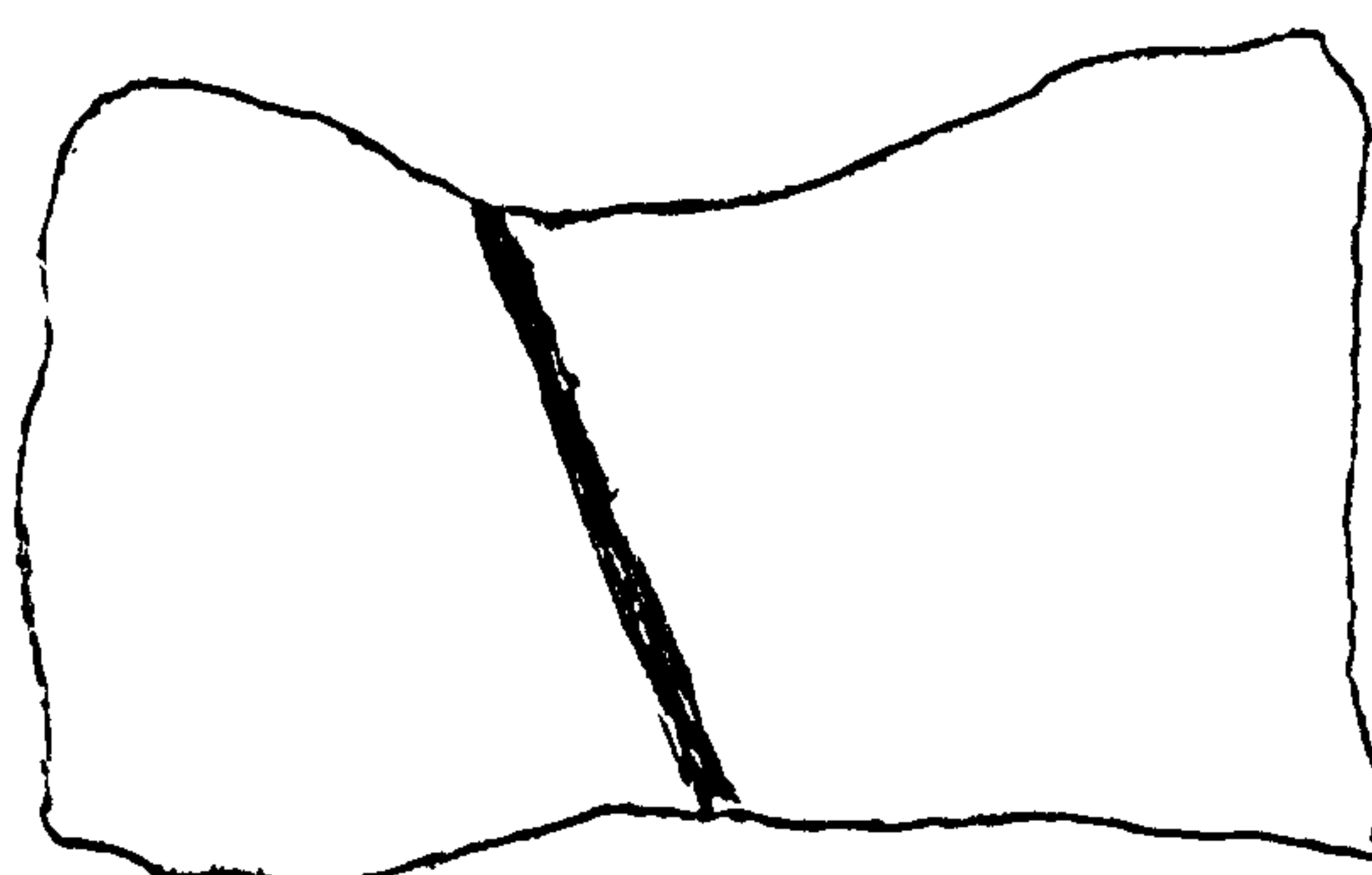
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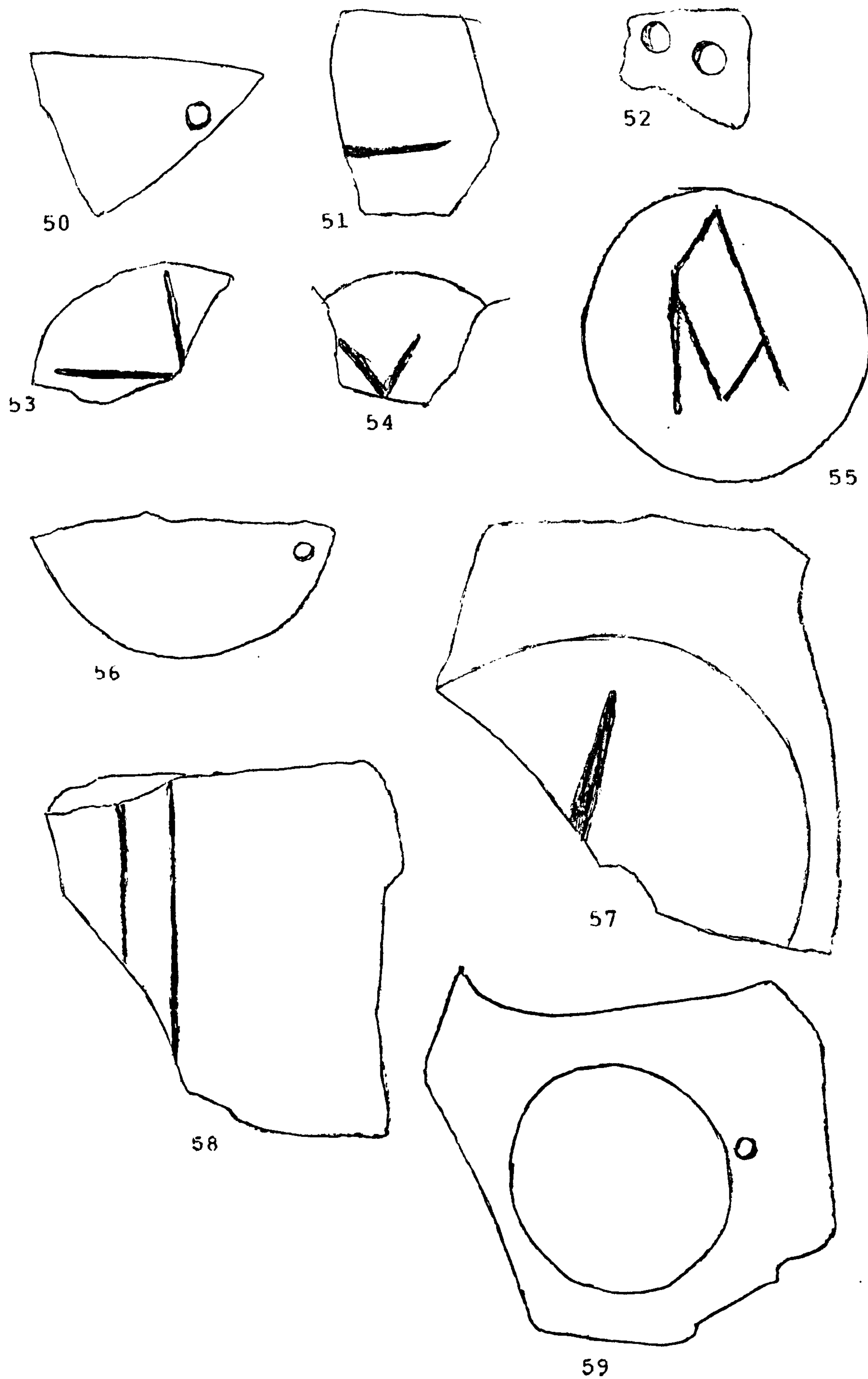


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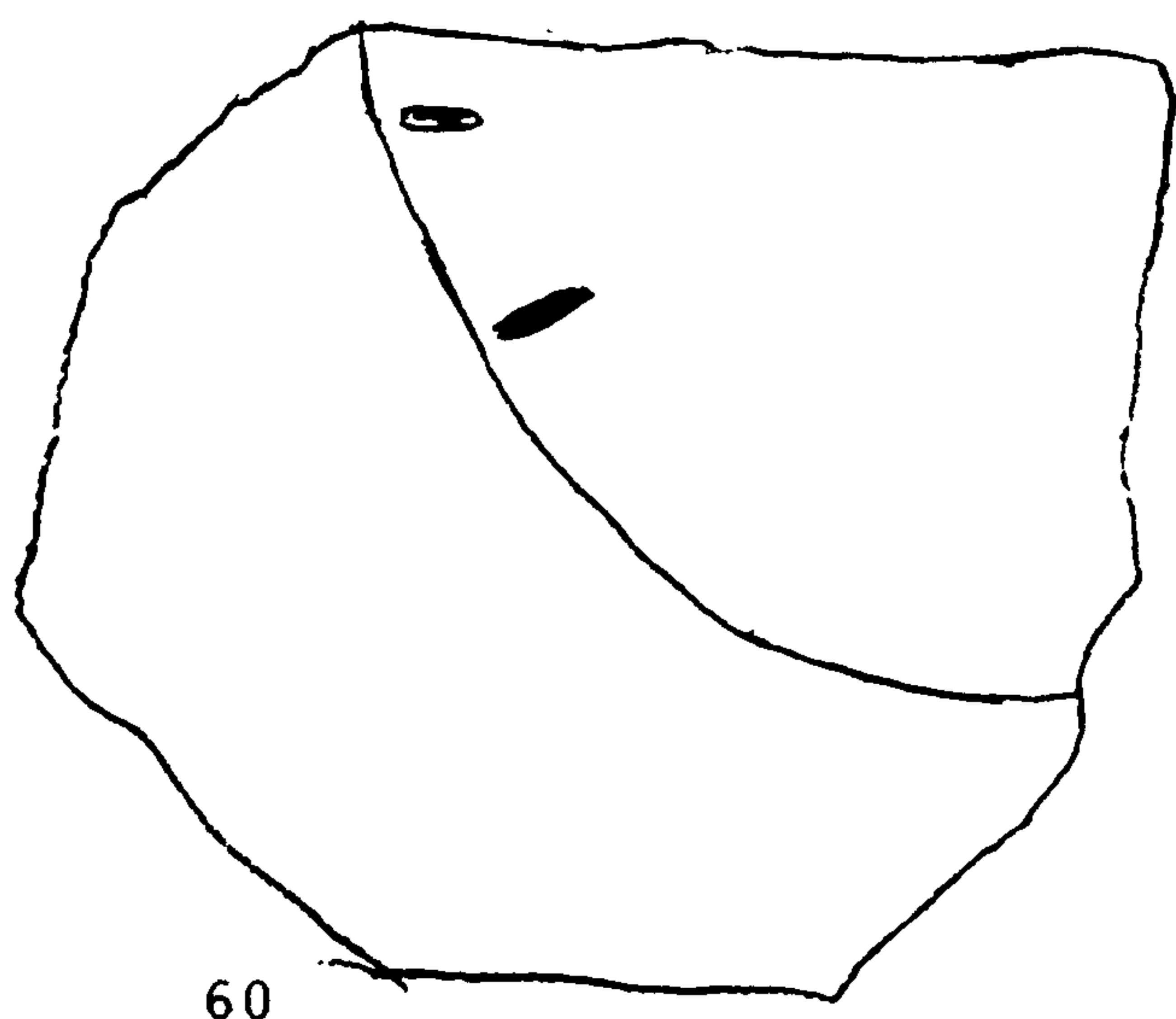


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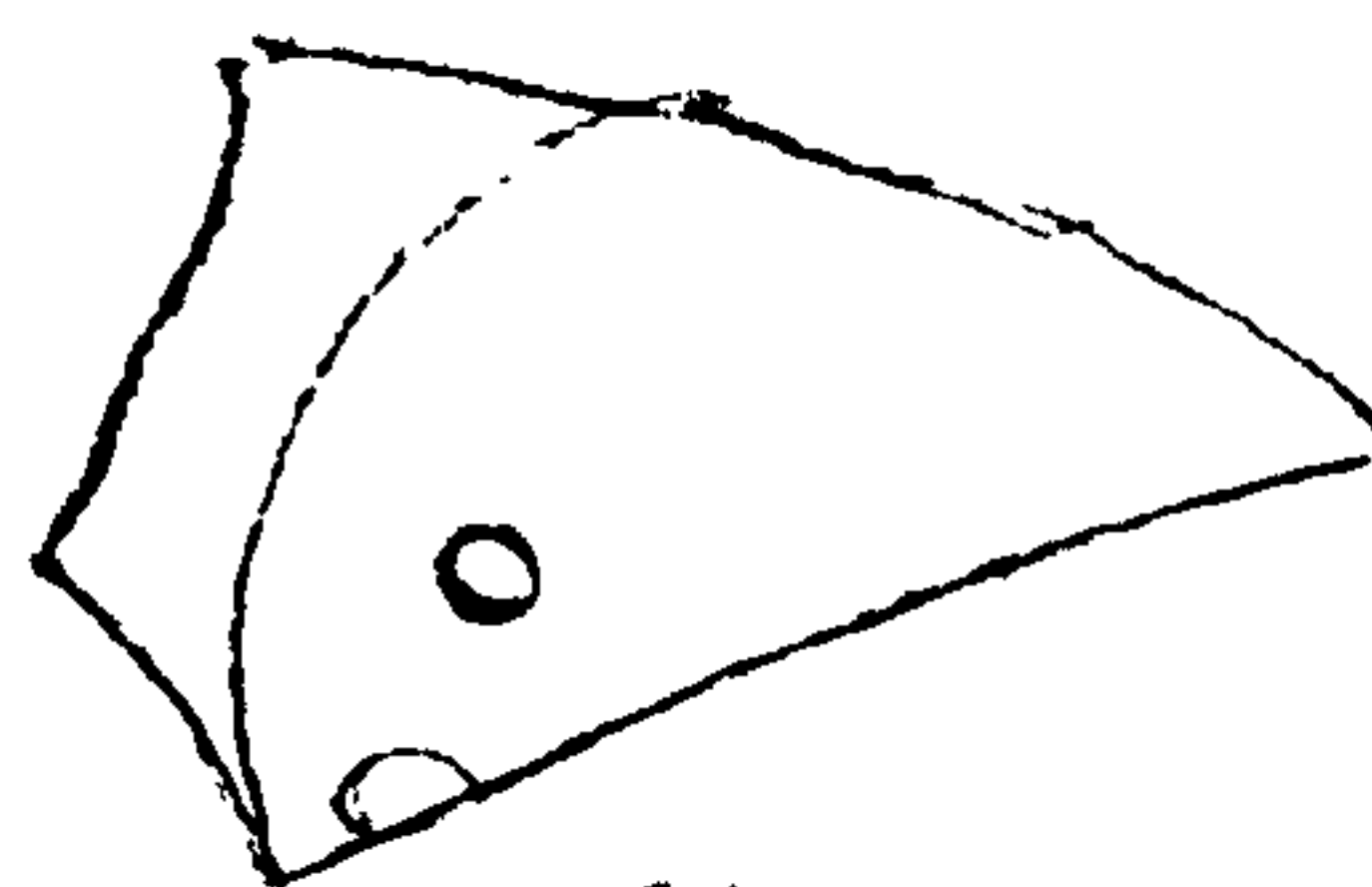
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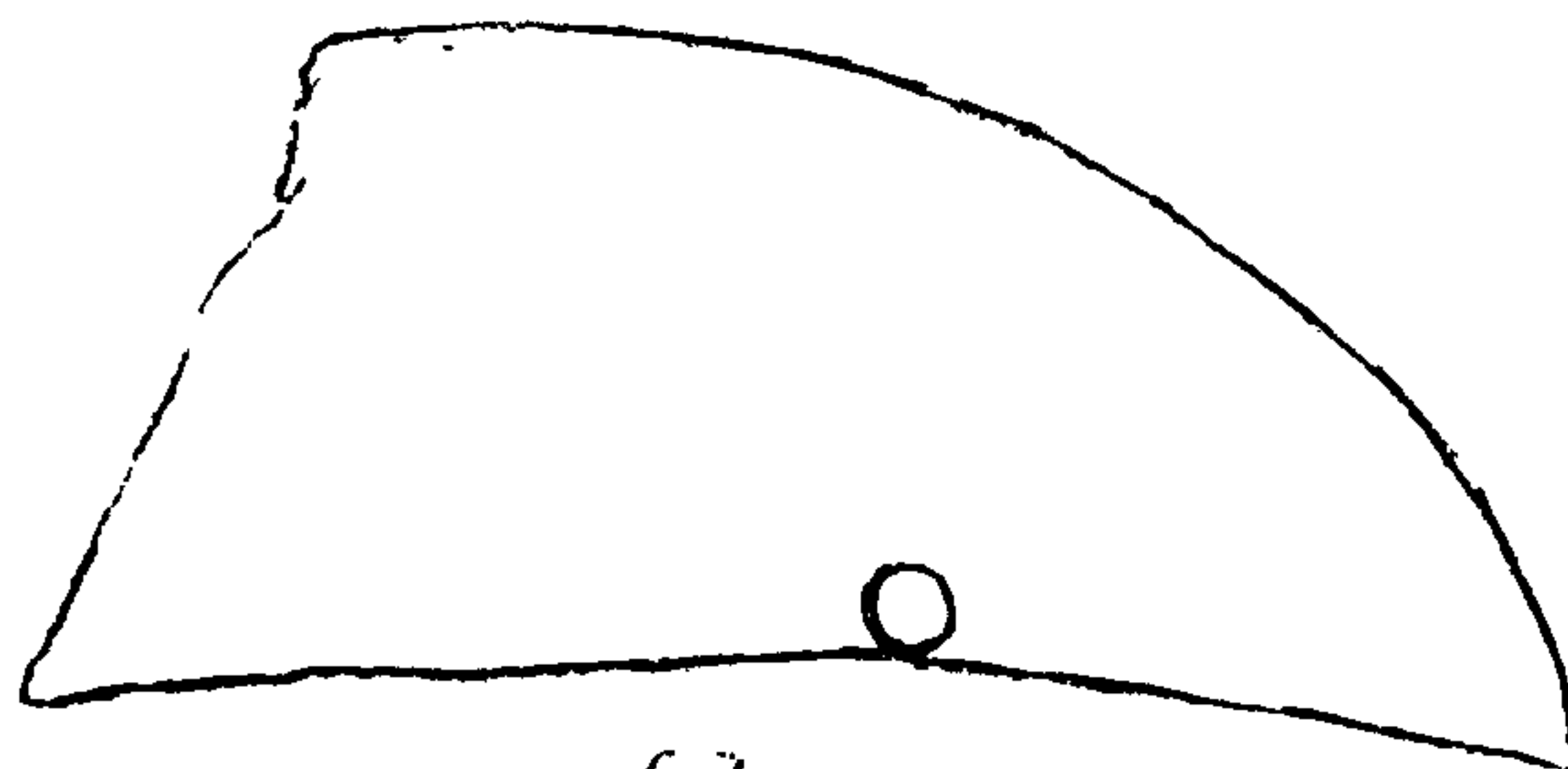
21. Phylakopi 1974-77 50-59. Scale 1:1



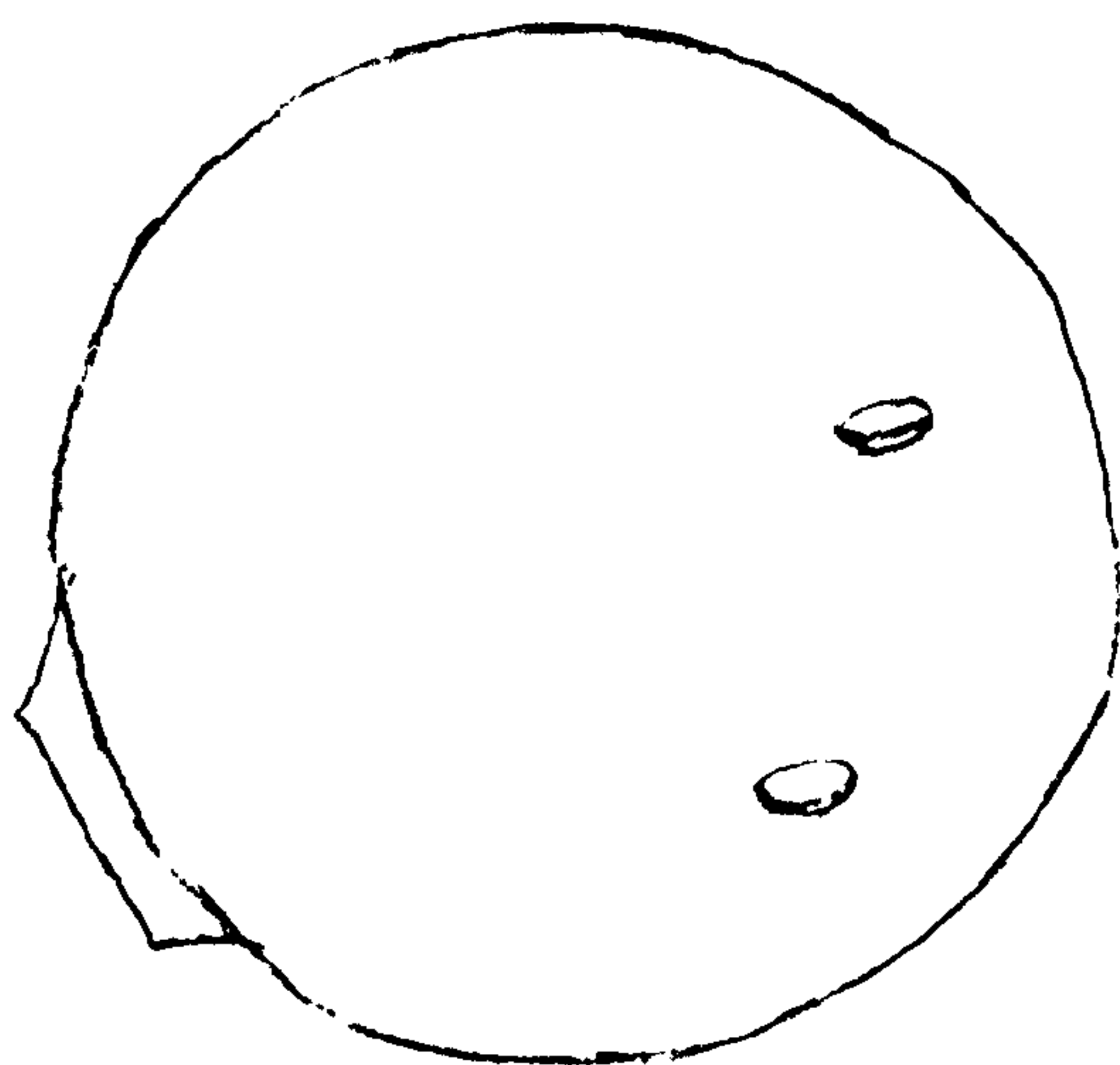
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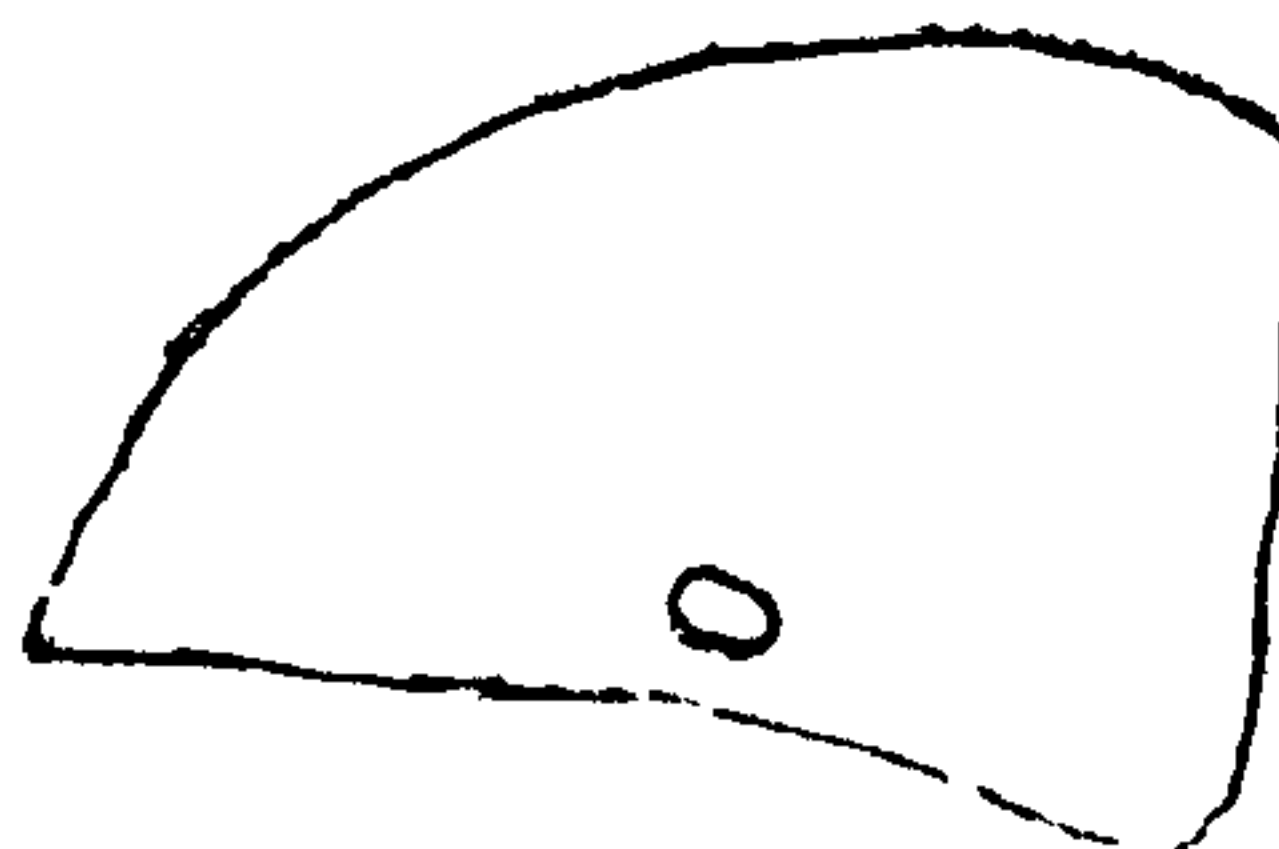
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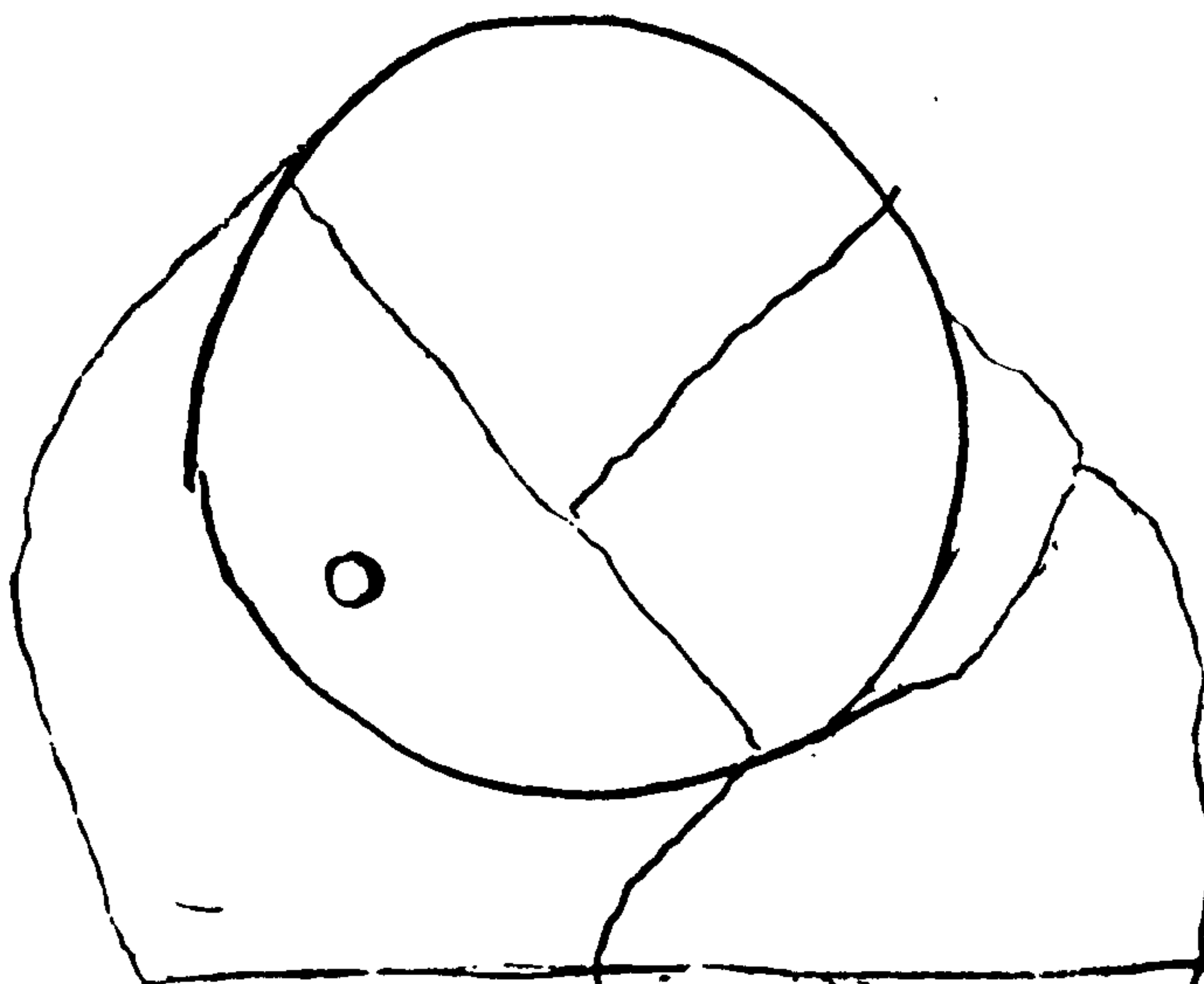
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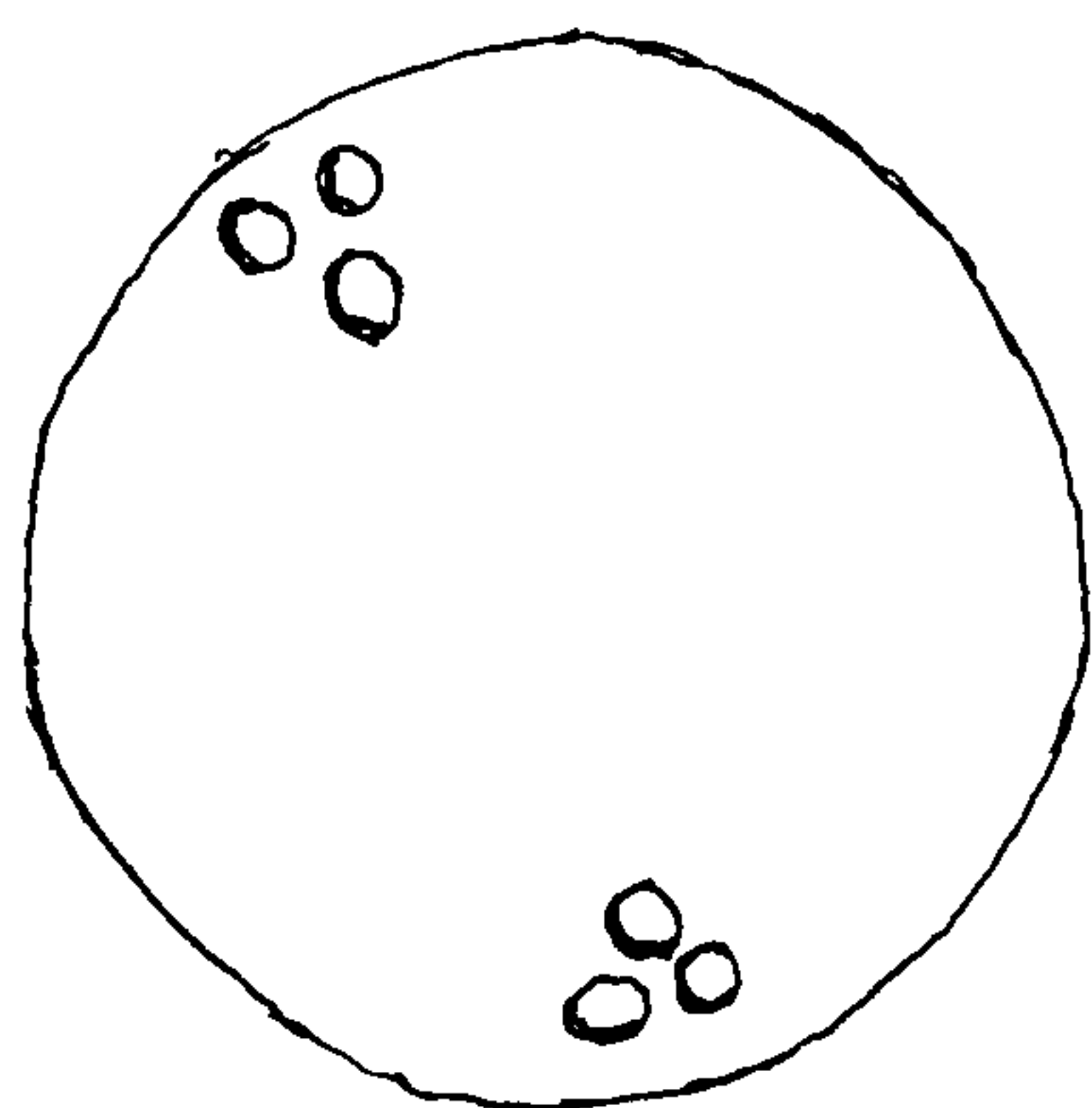


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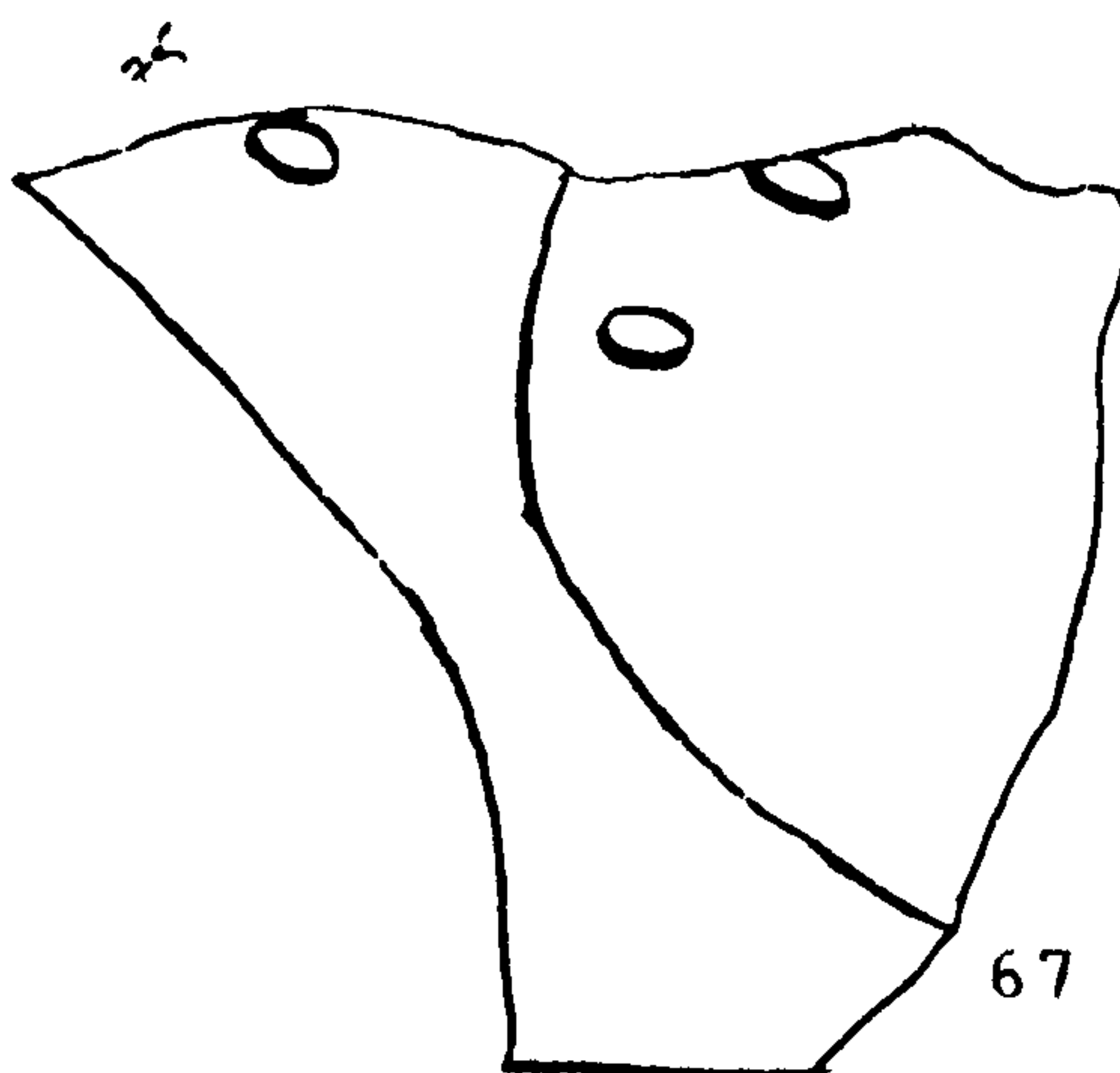


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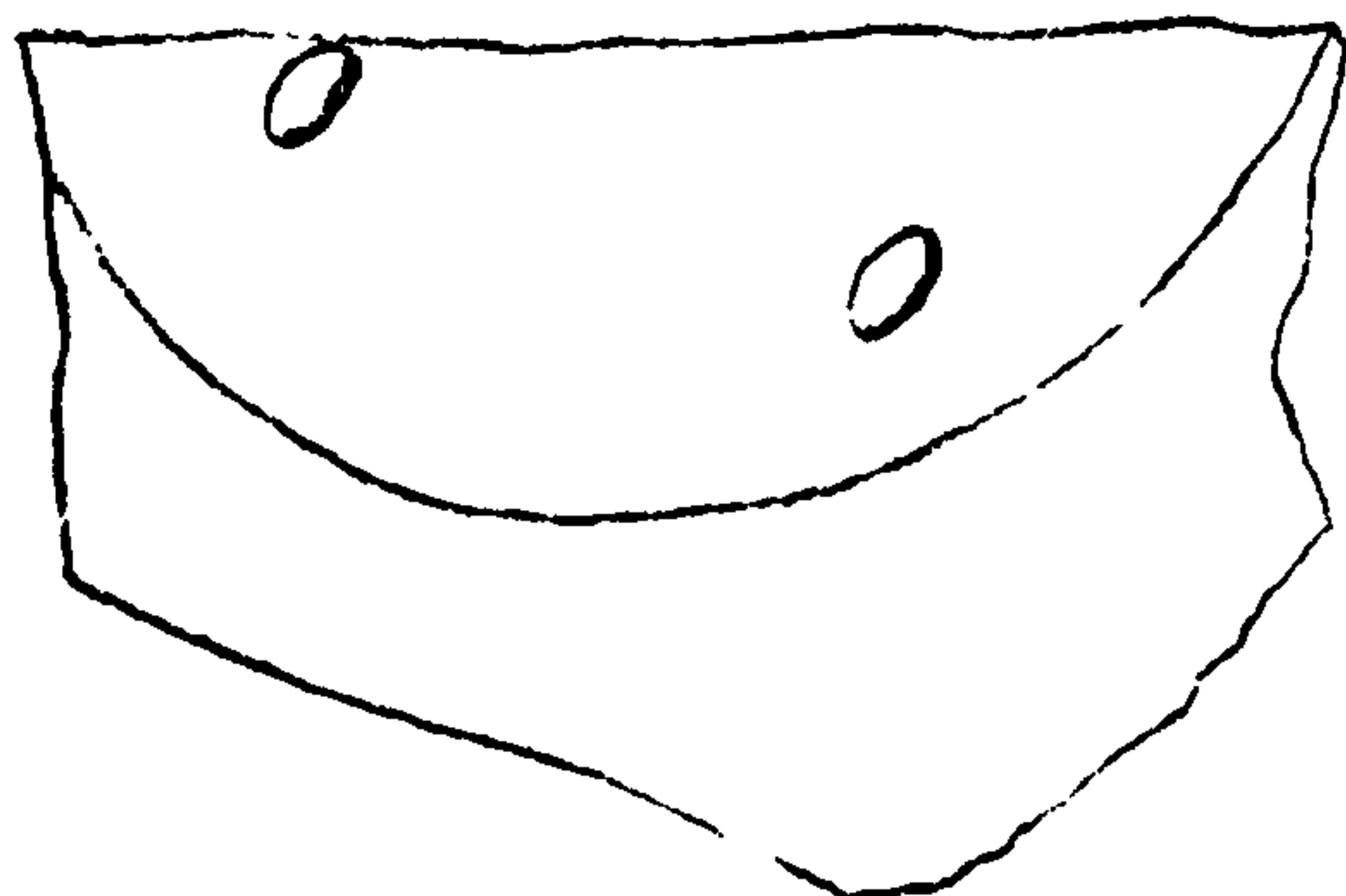
22. Phylakopi 1974-77 60-65. Scale 1:1



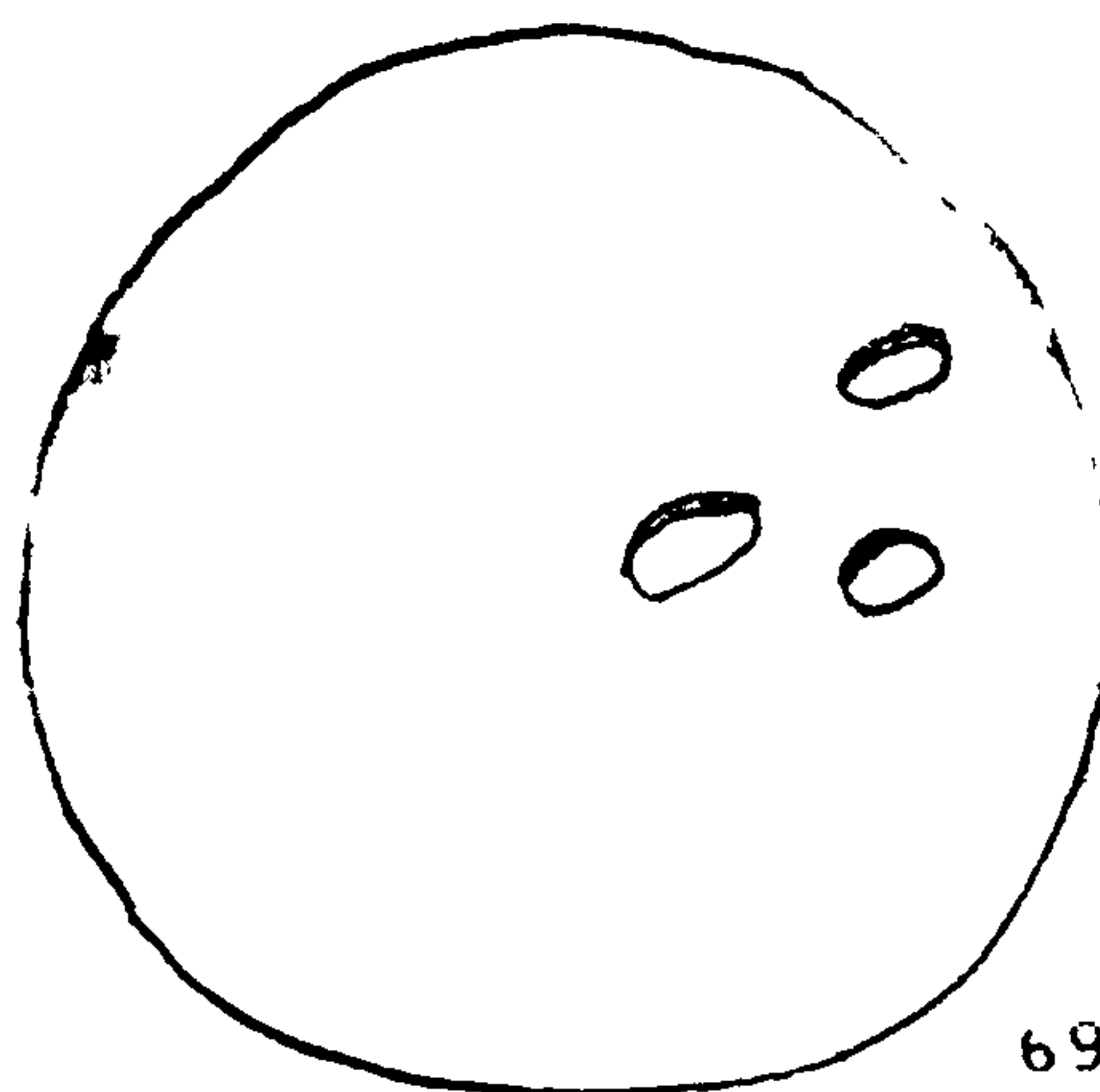
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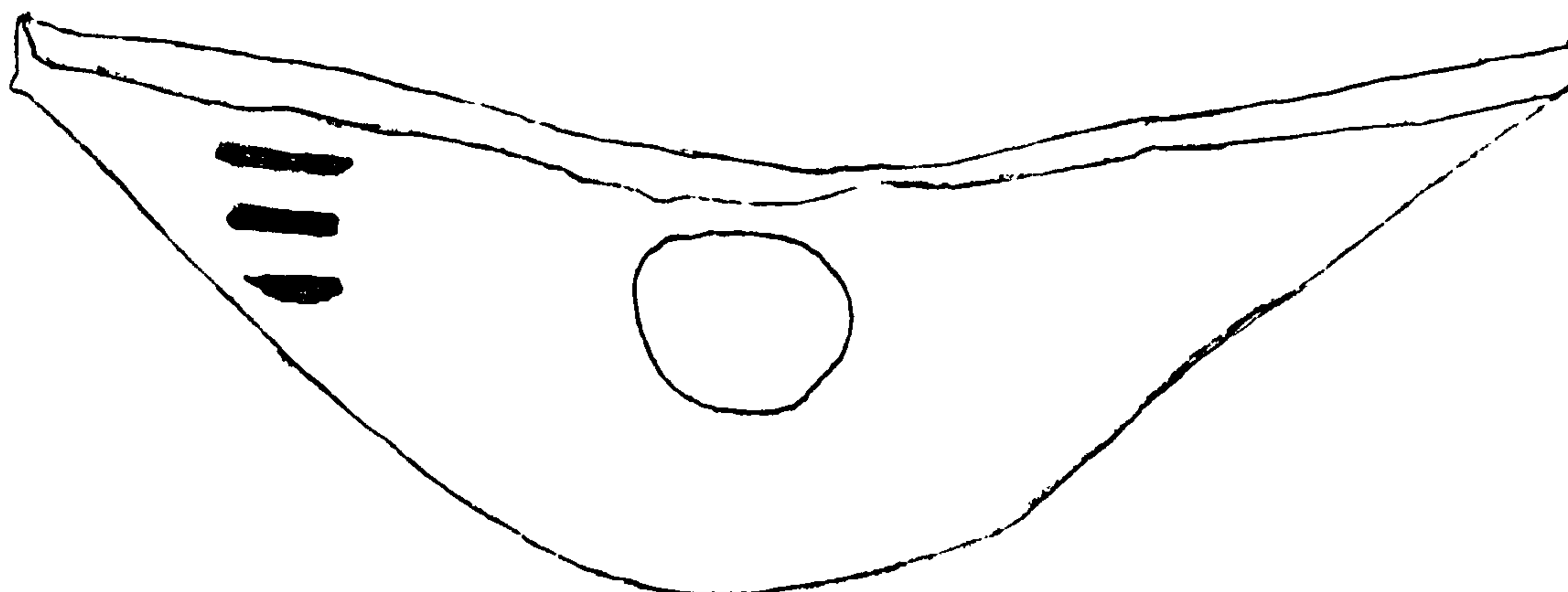
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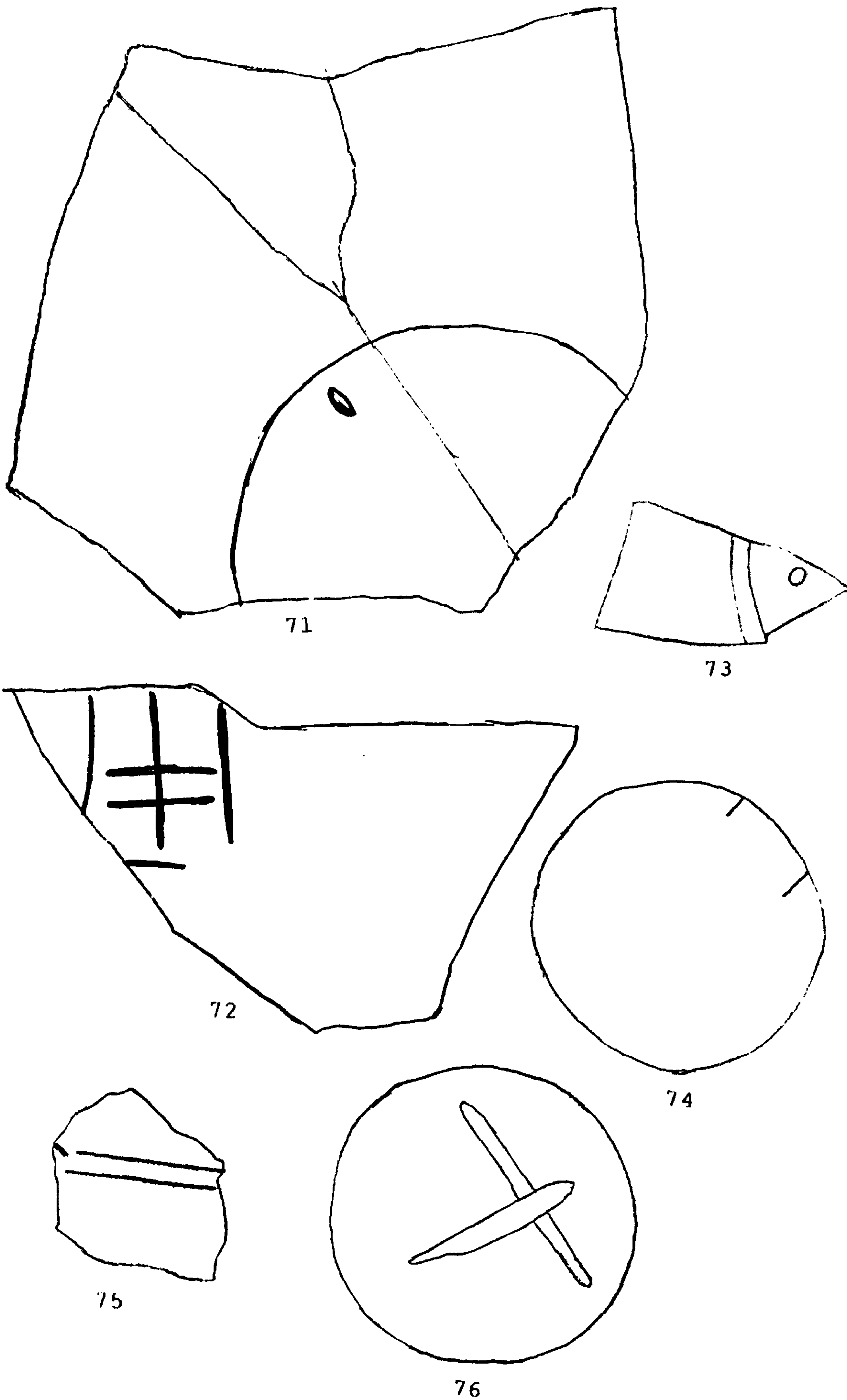


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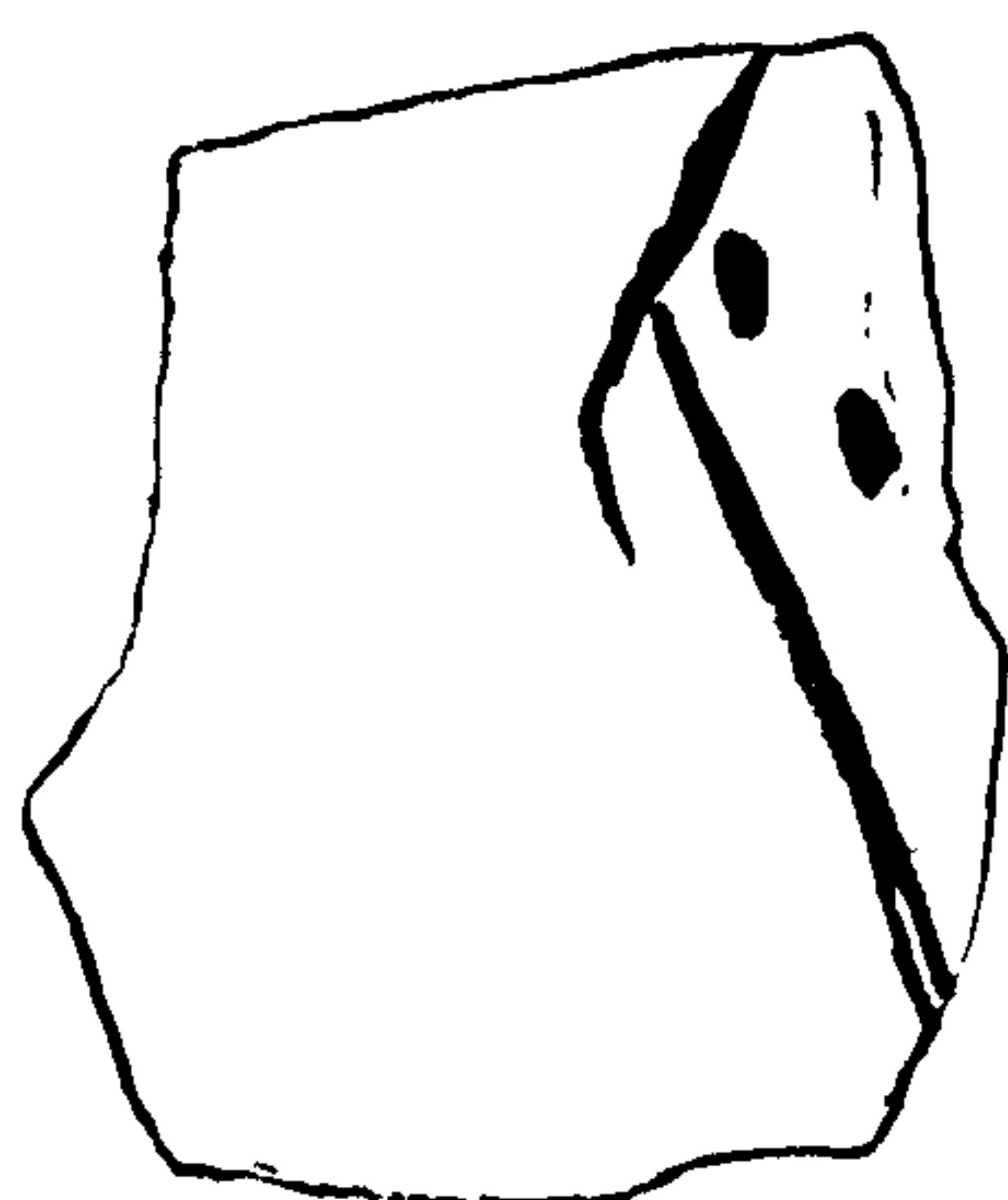


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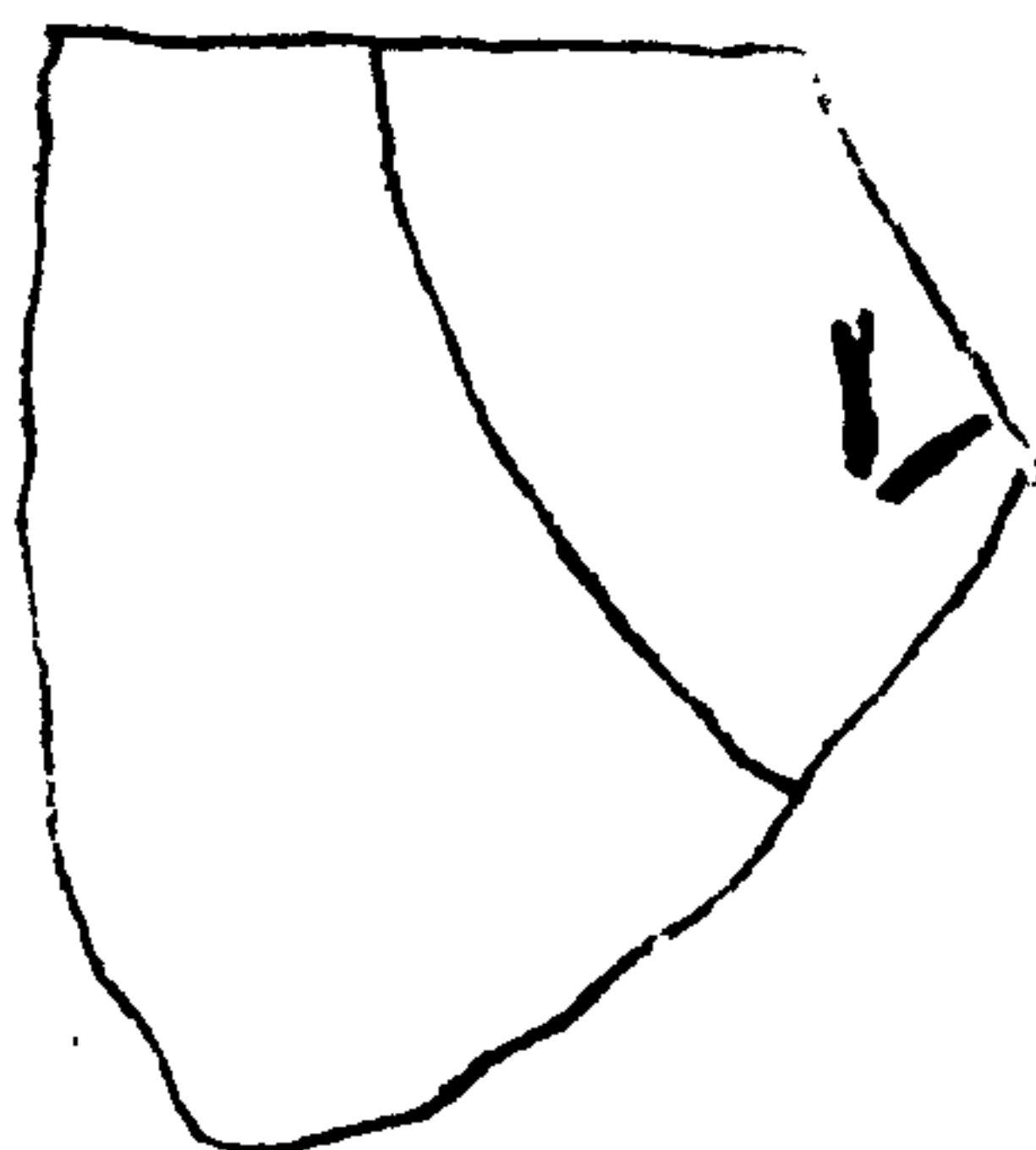
23. Phylakopi 1974-77 66-70. Scale 1:1



24. Phylakopi 1974-77 71-76. Scale 1:1



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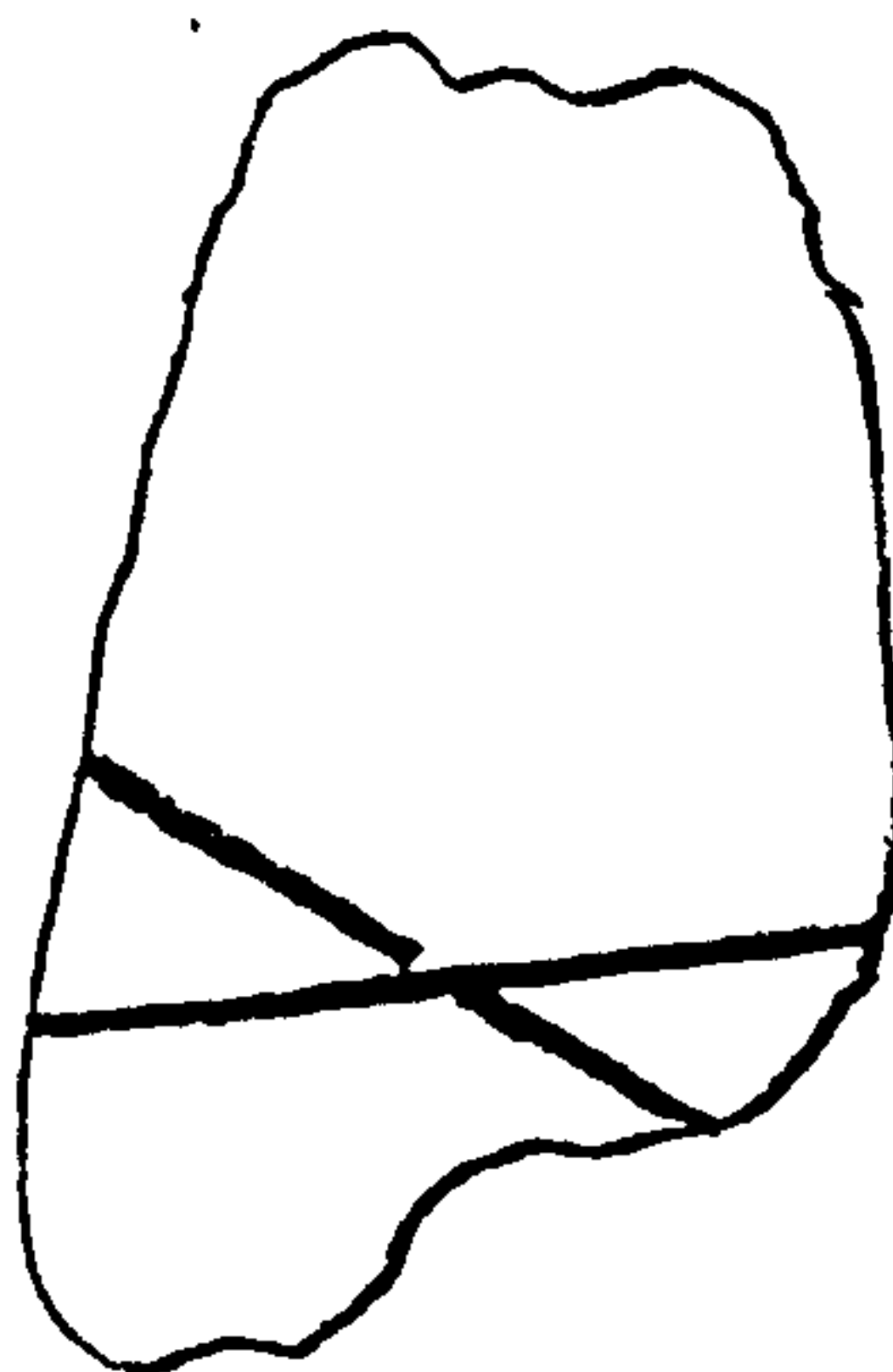
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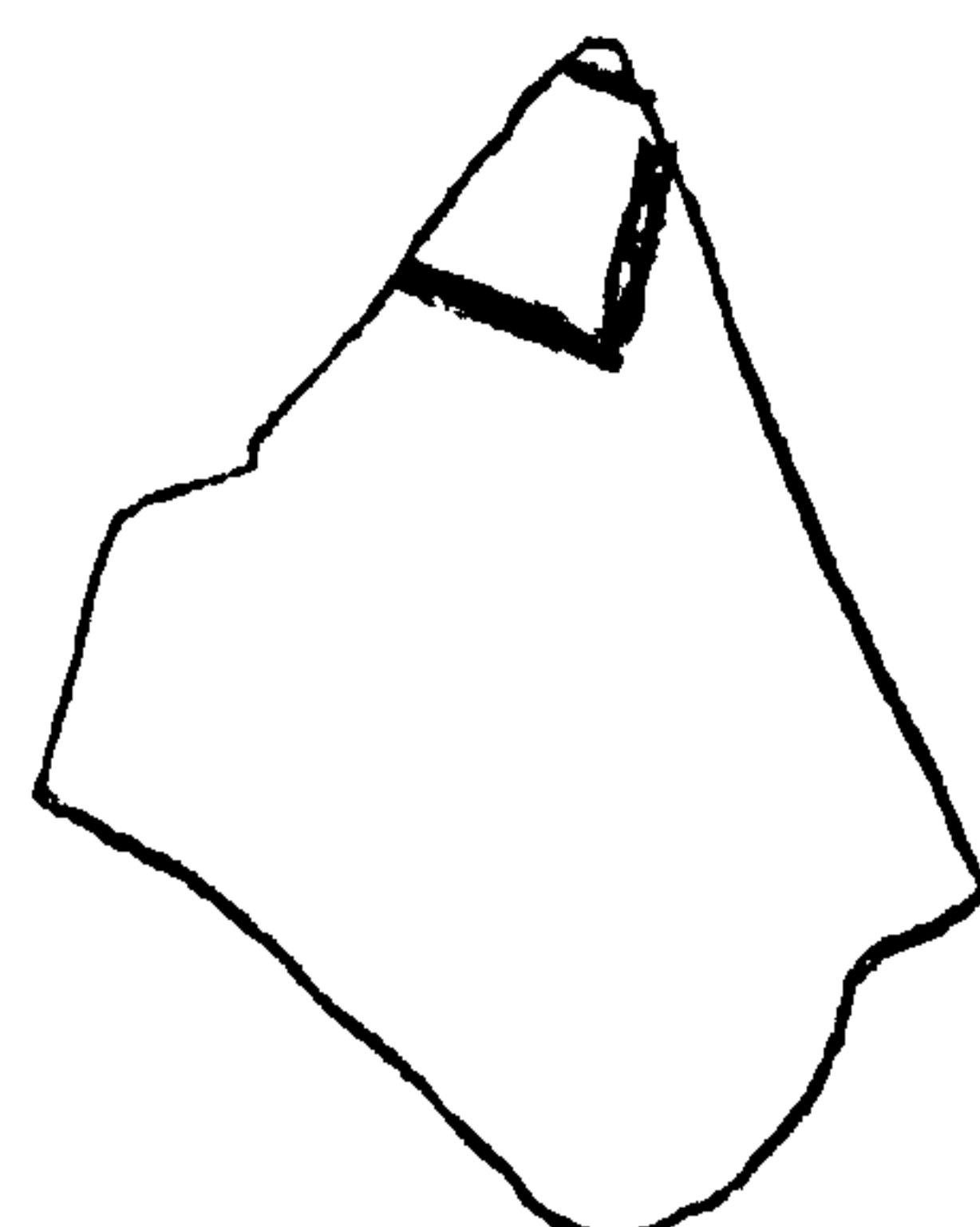
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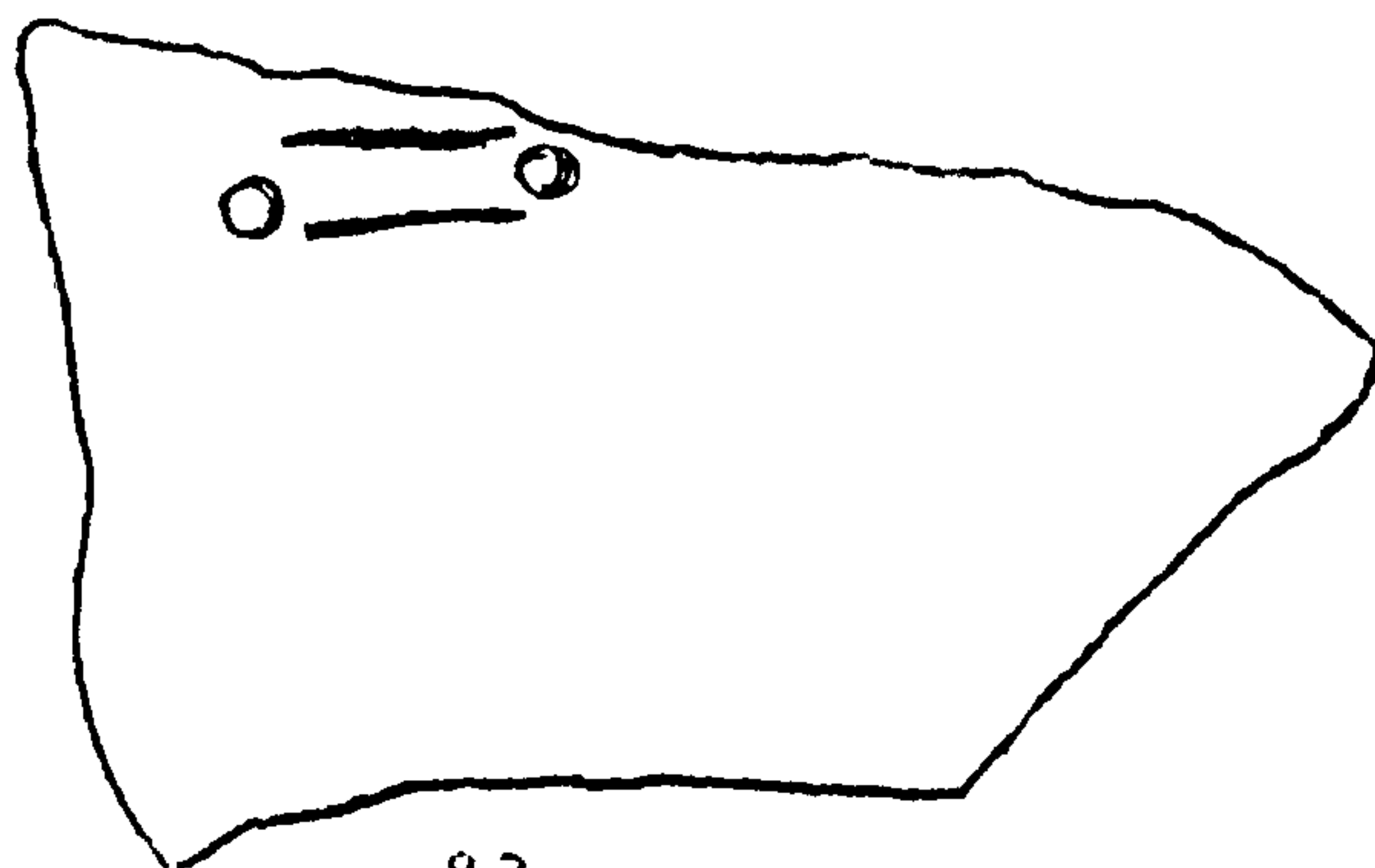
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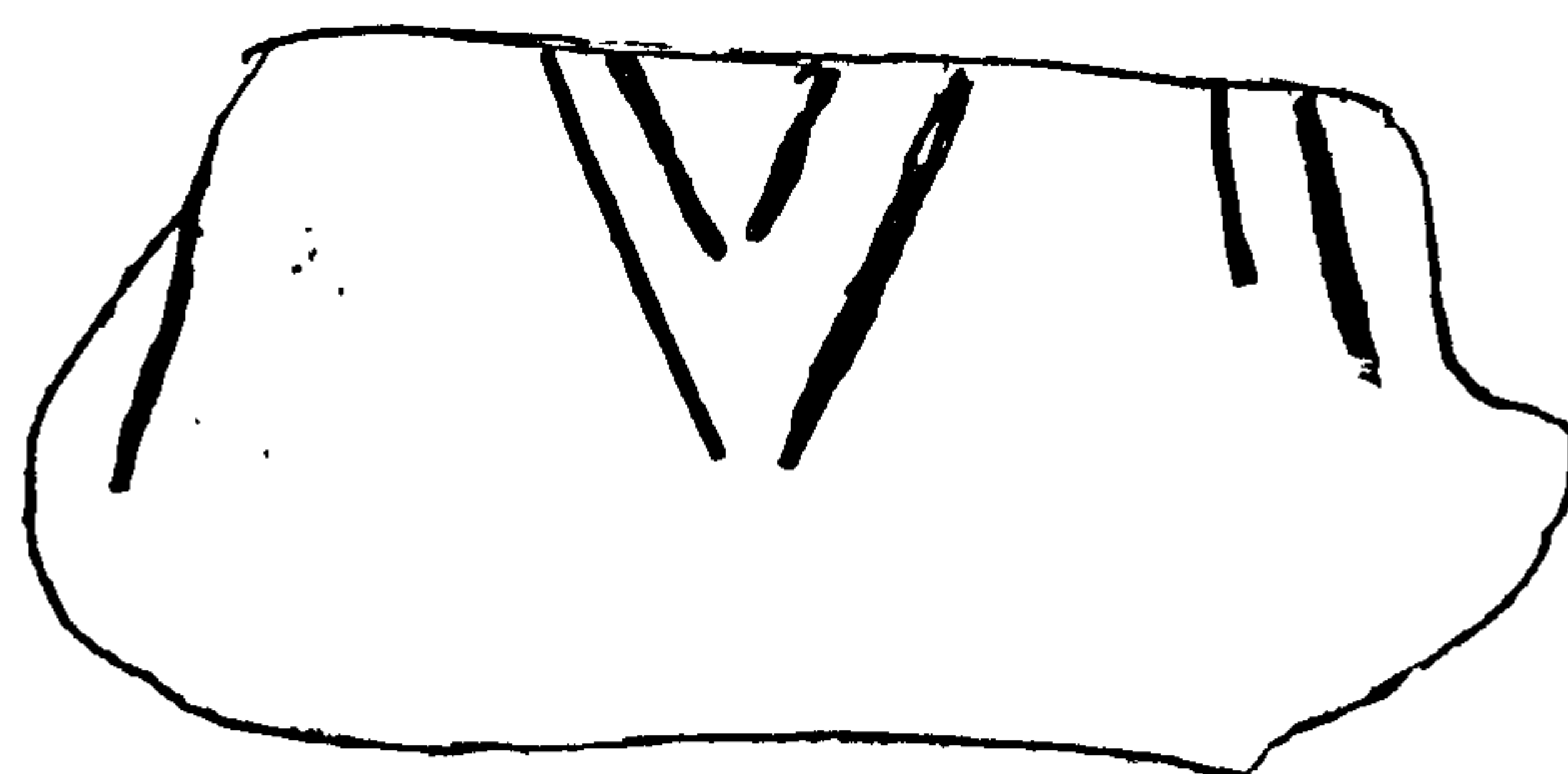
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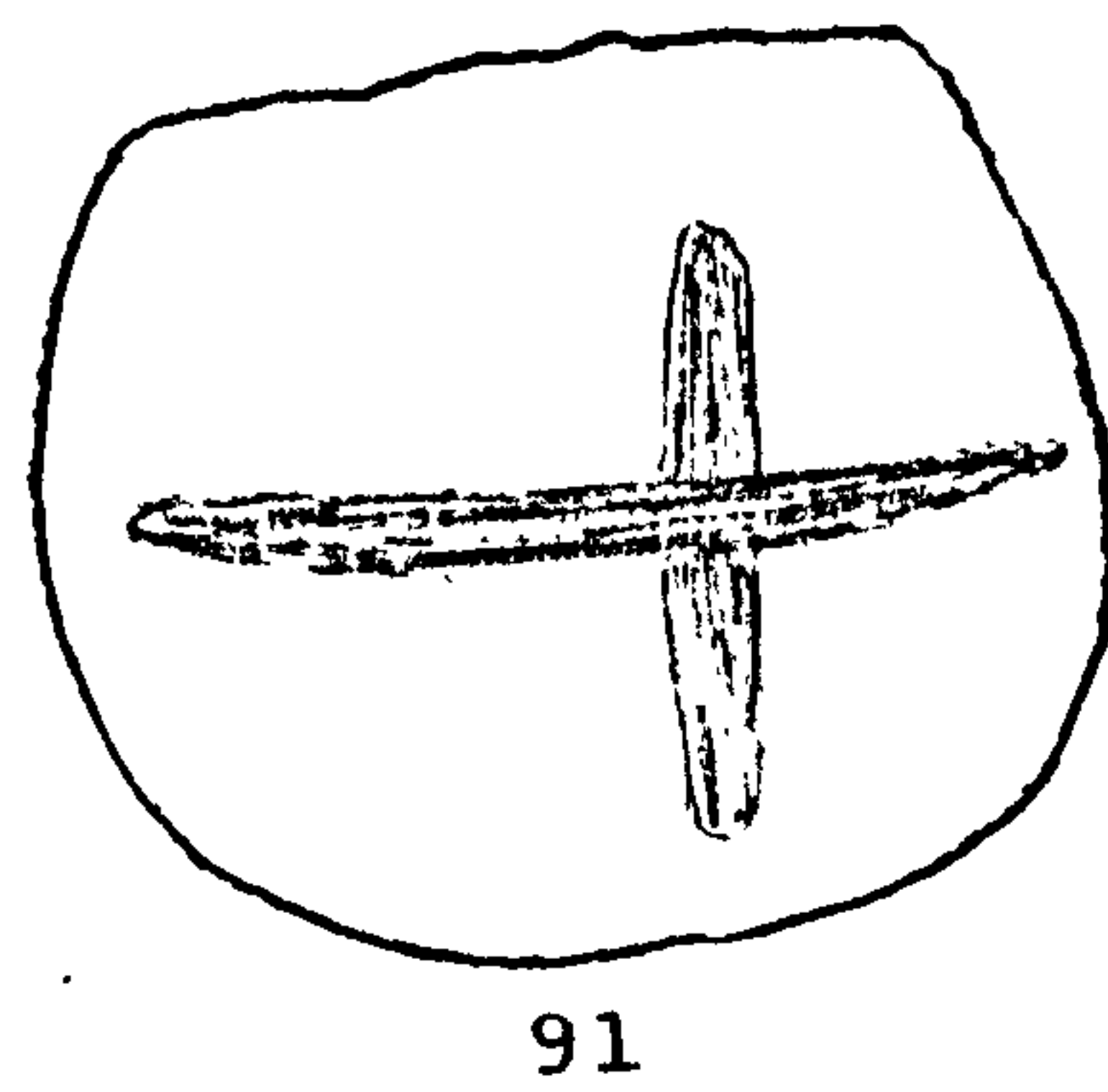
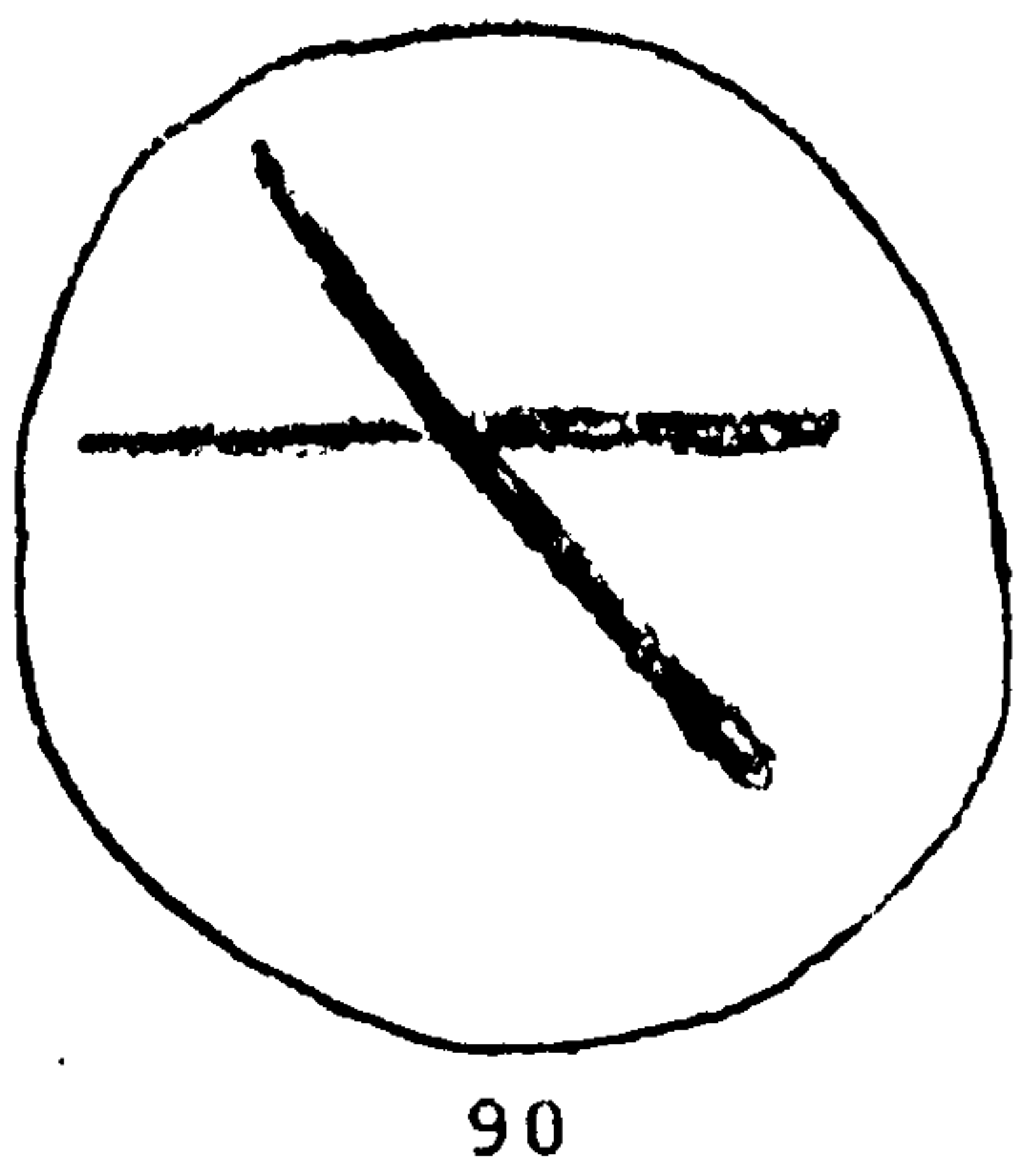
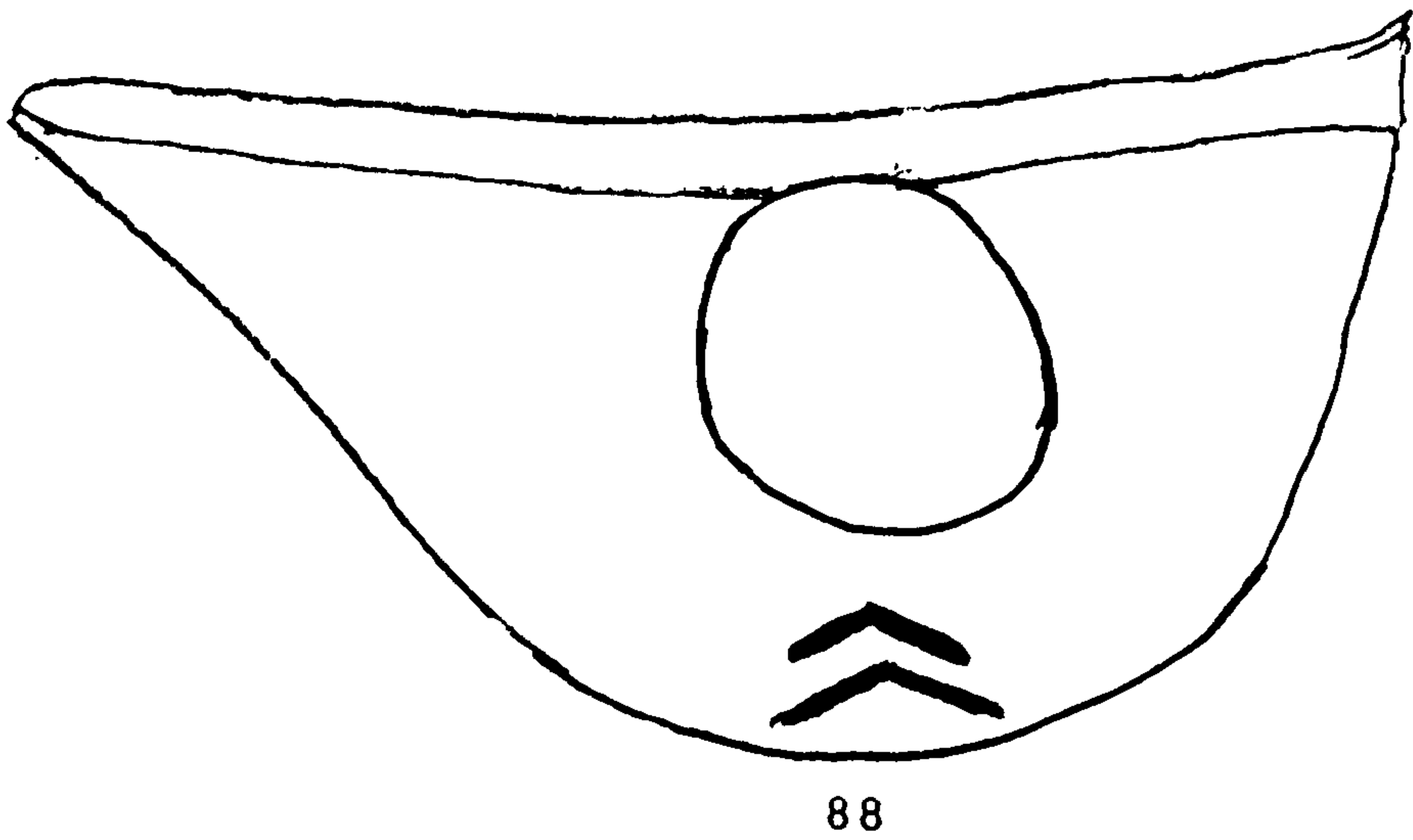
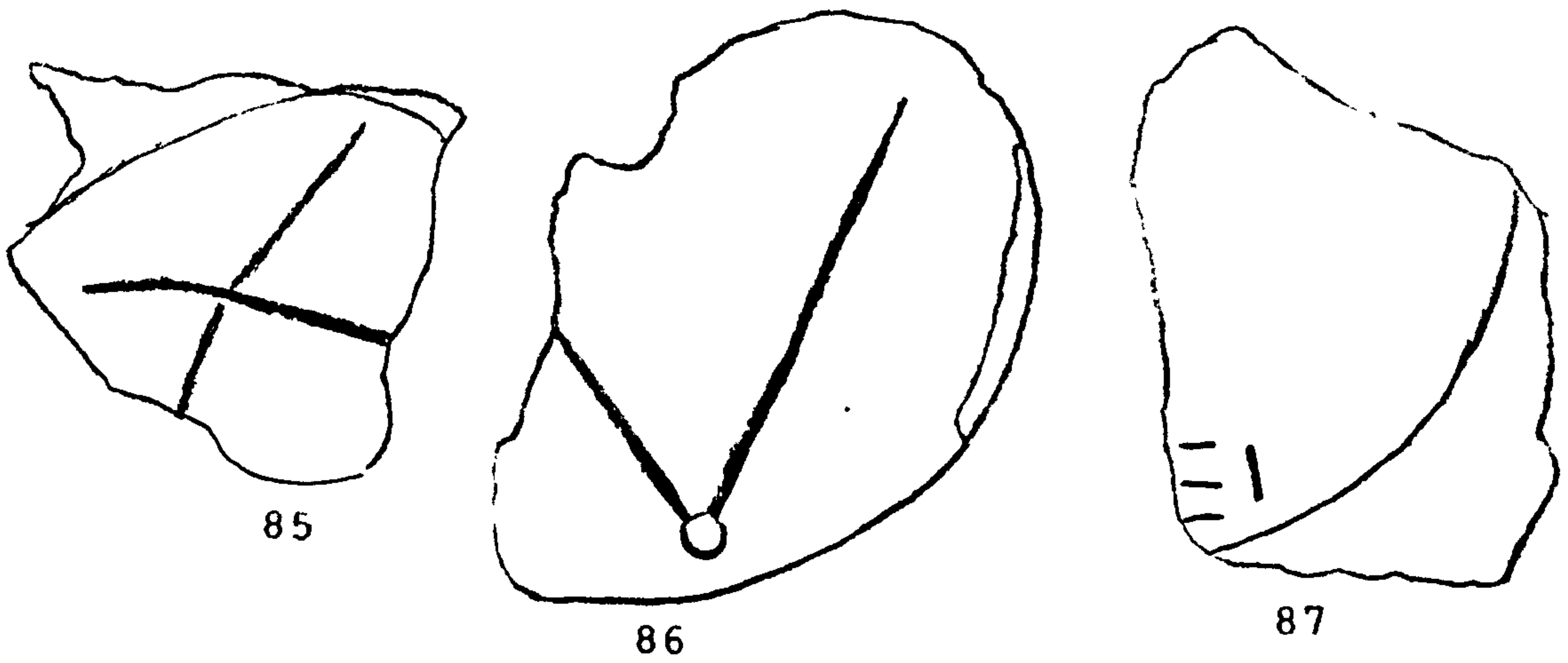


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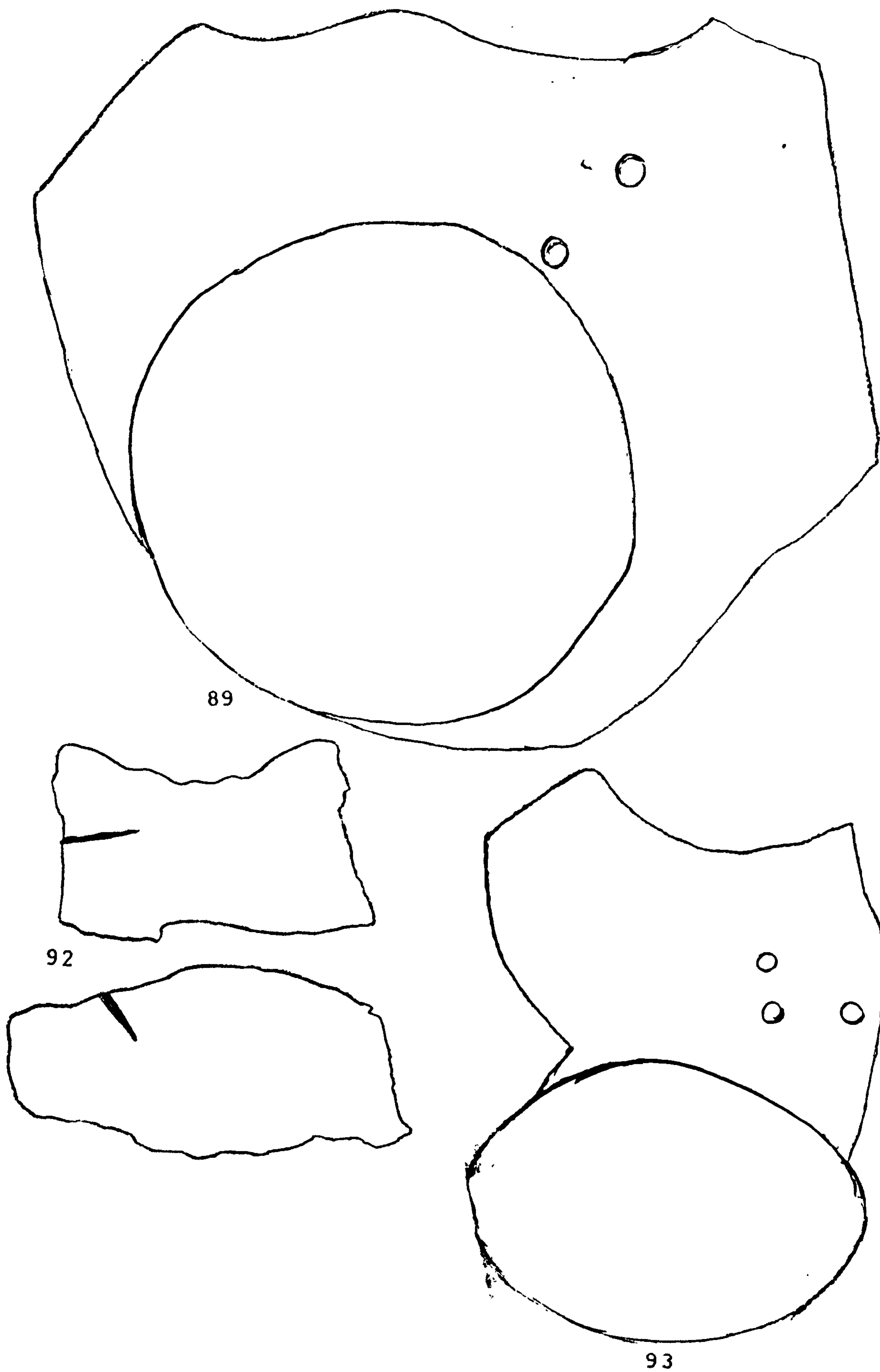


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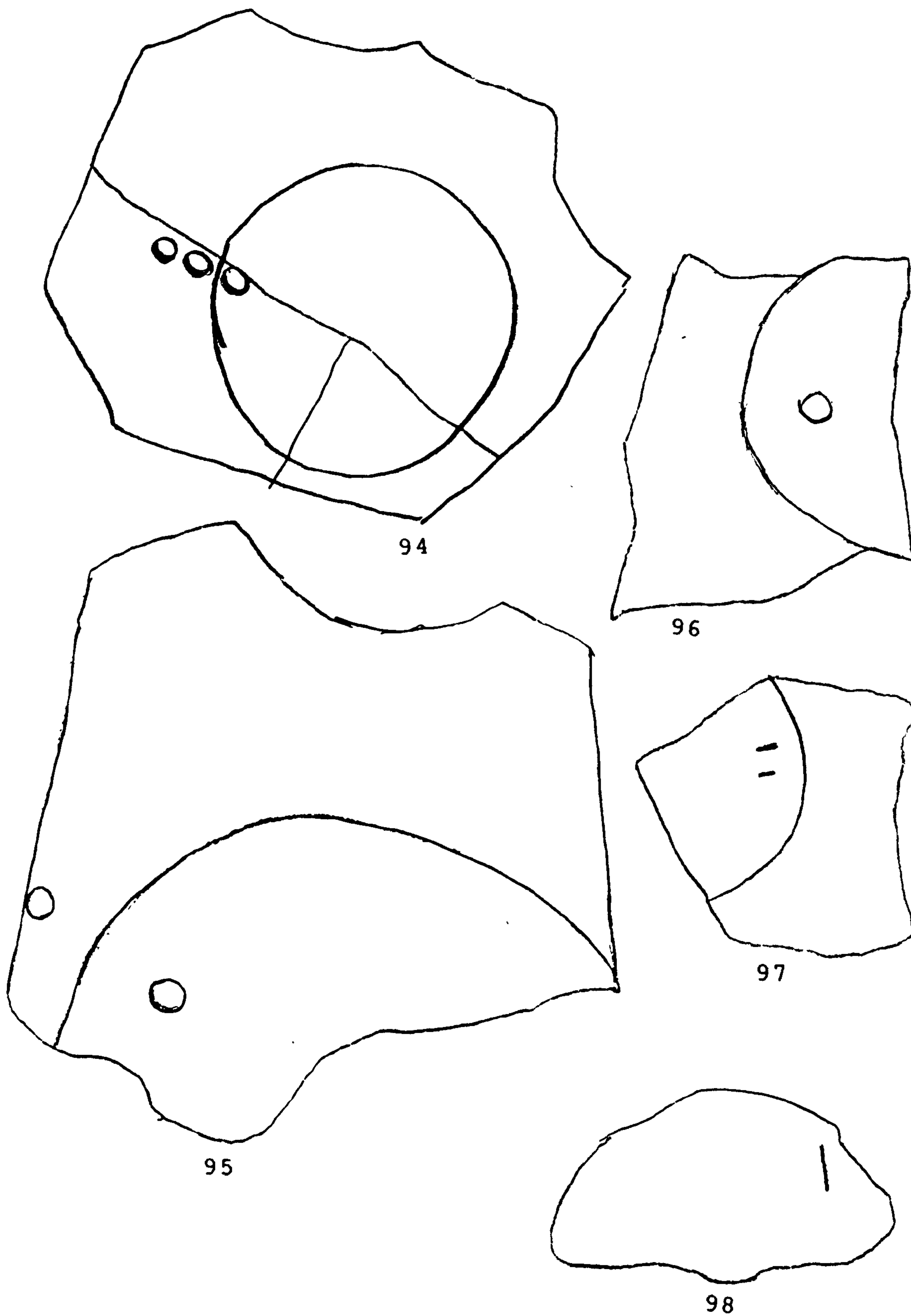
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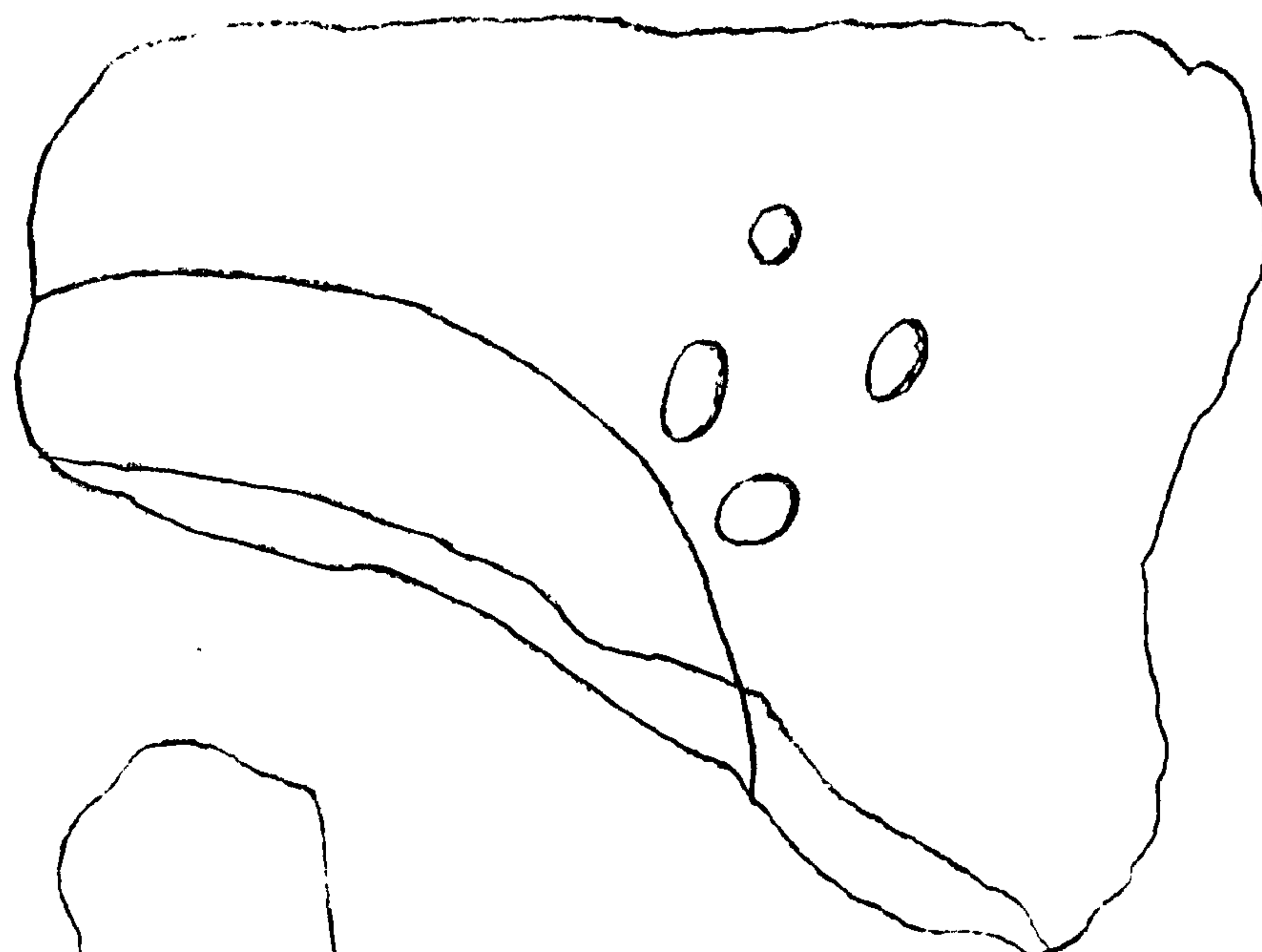
26. Phylakopi 1974-77 85-88, 90, 91. Scale 1:1



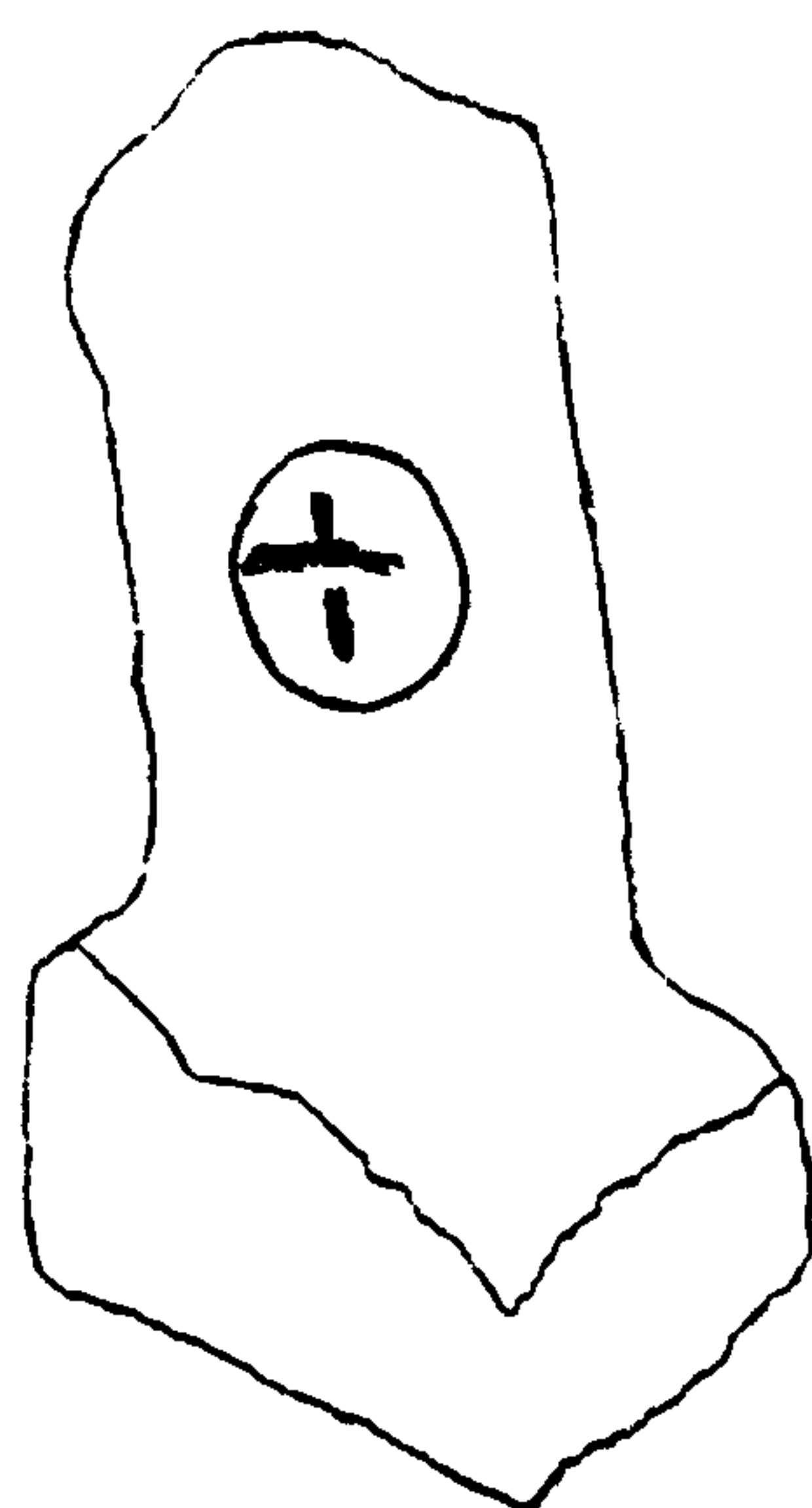
27. Phylakopi 1974-77 89, 92, 93. Scale 1:1



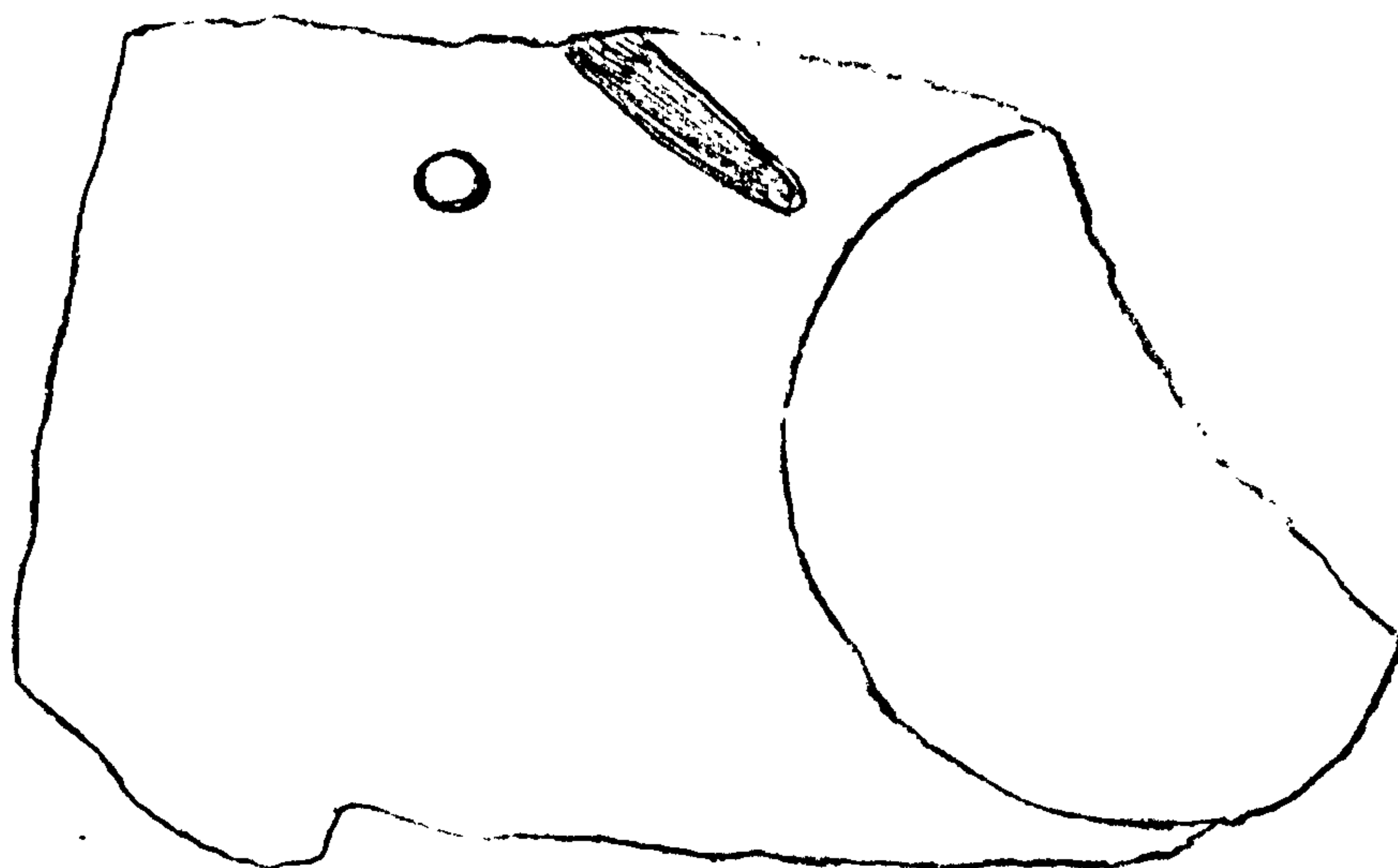
28. Phylakopi 1974-77 94-98. Scale 1:1



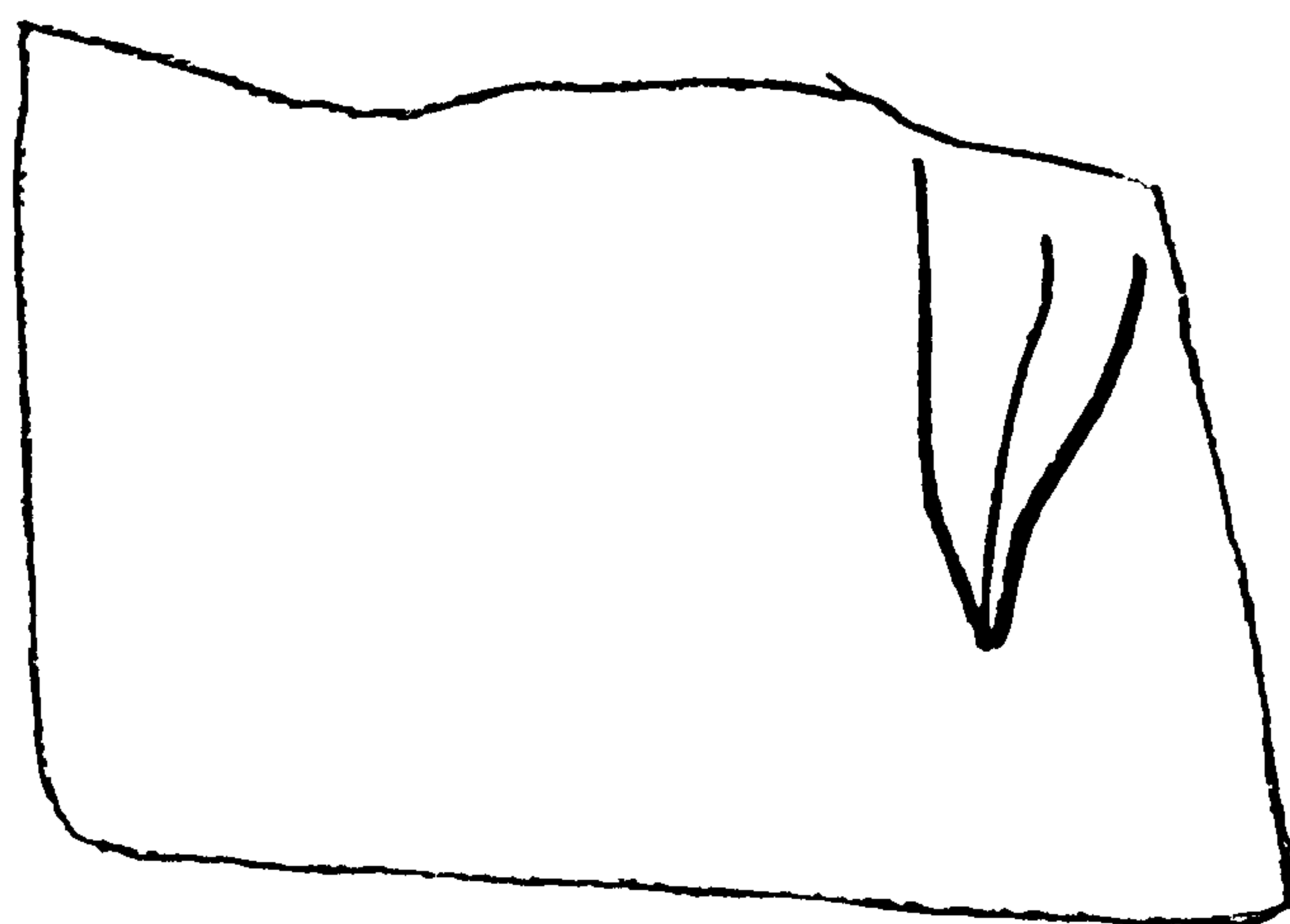
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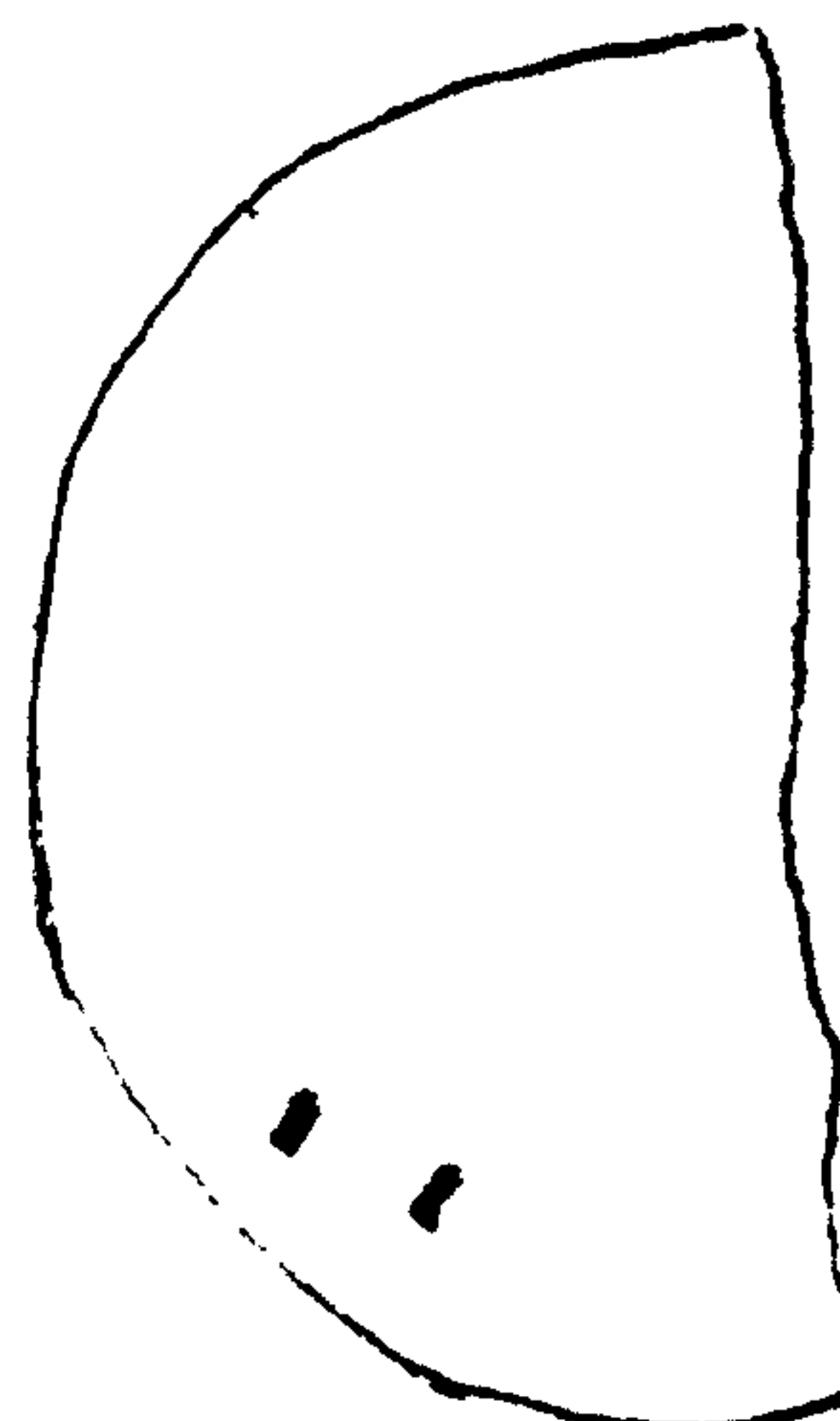
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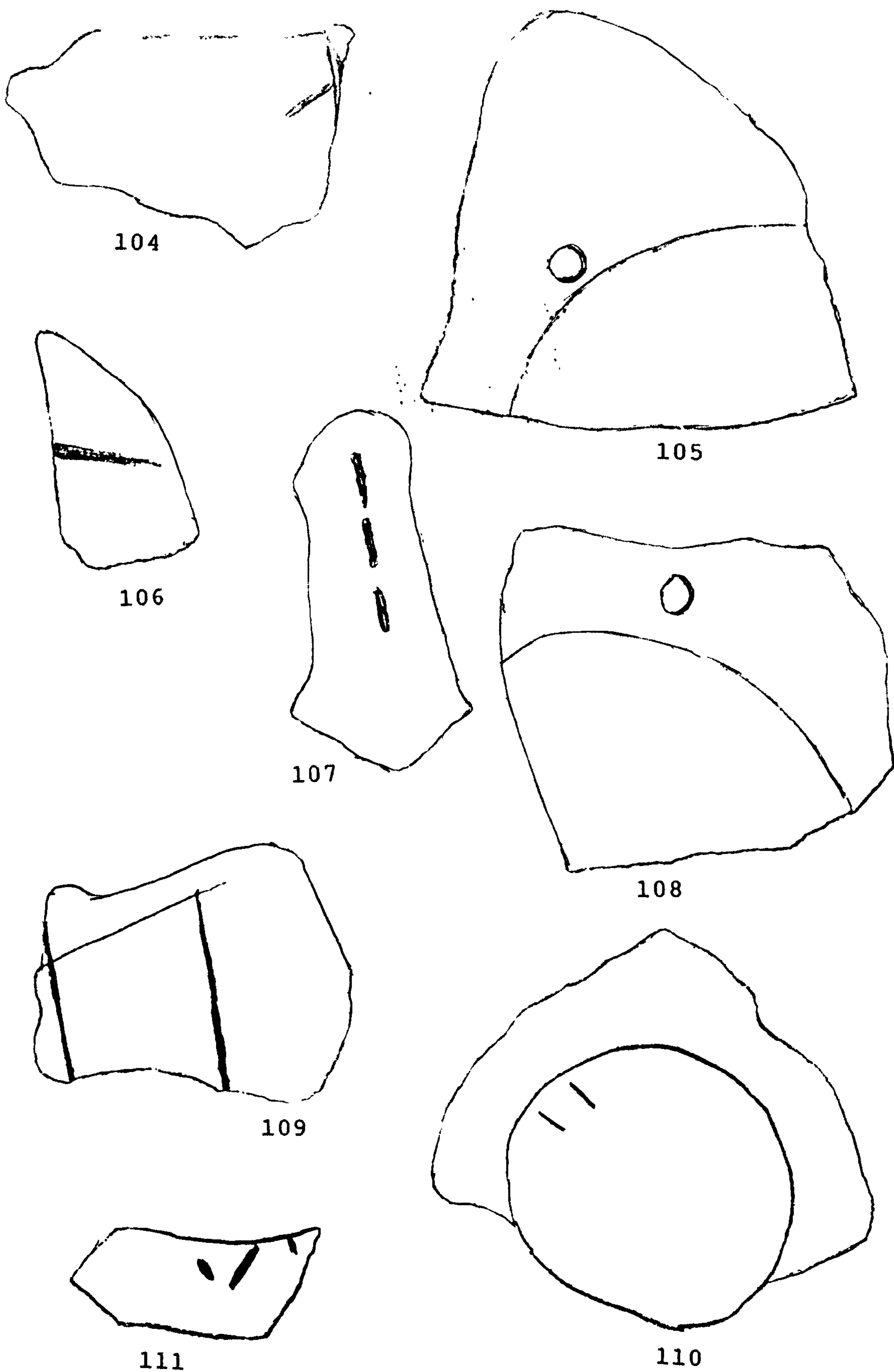


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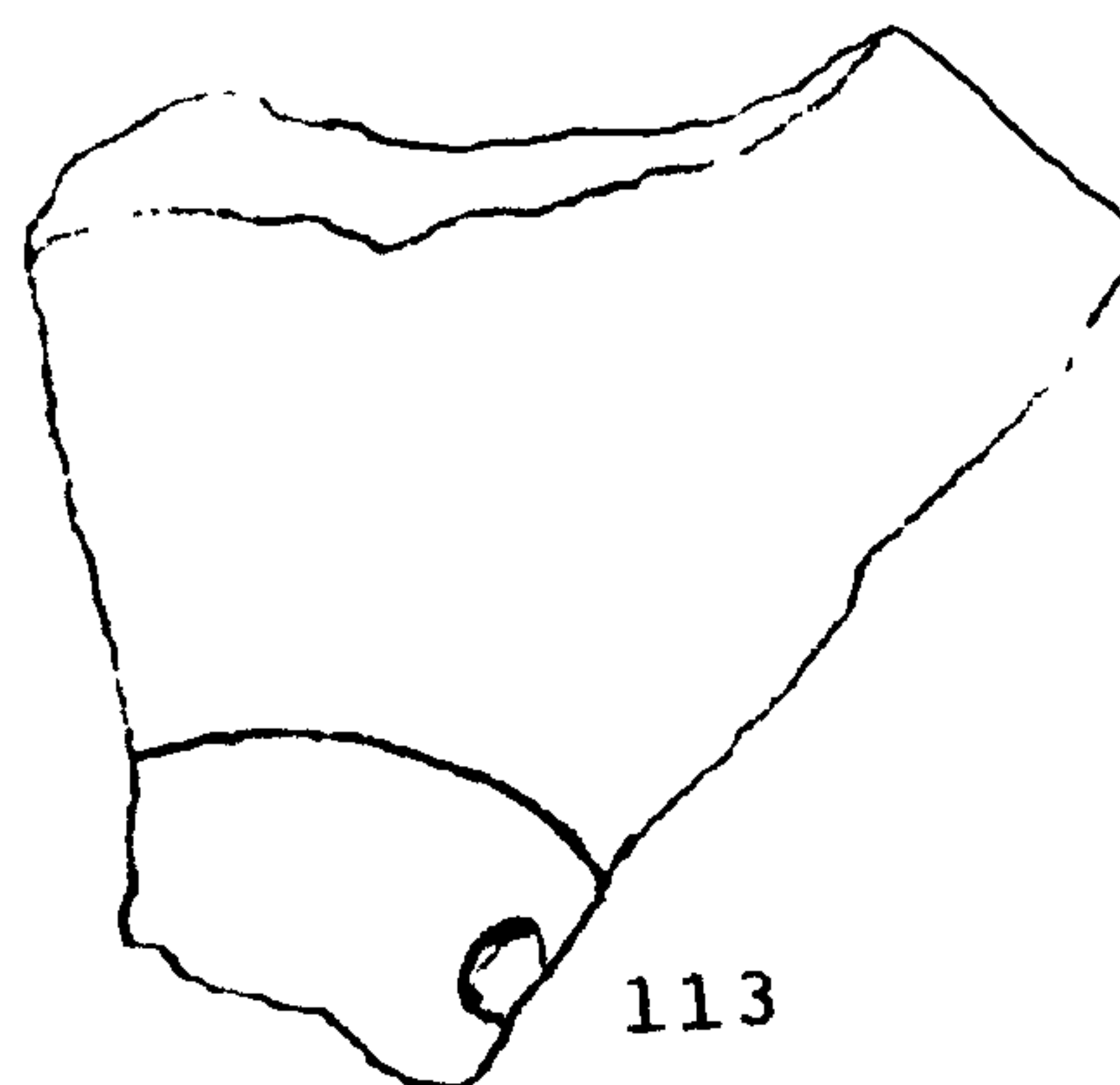
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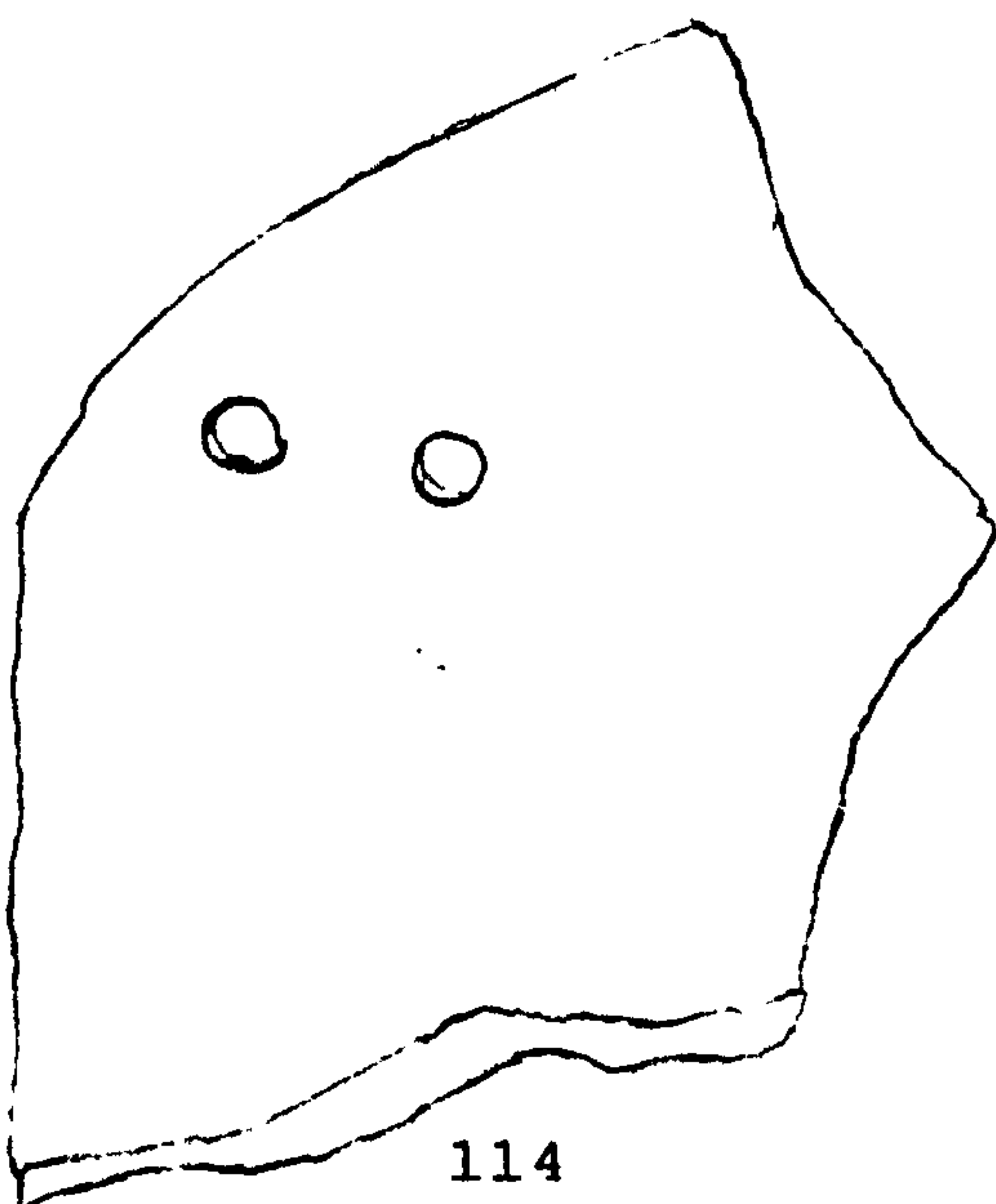
30. Phylakopi 1974-77 104-111. Scale 1:1



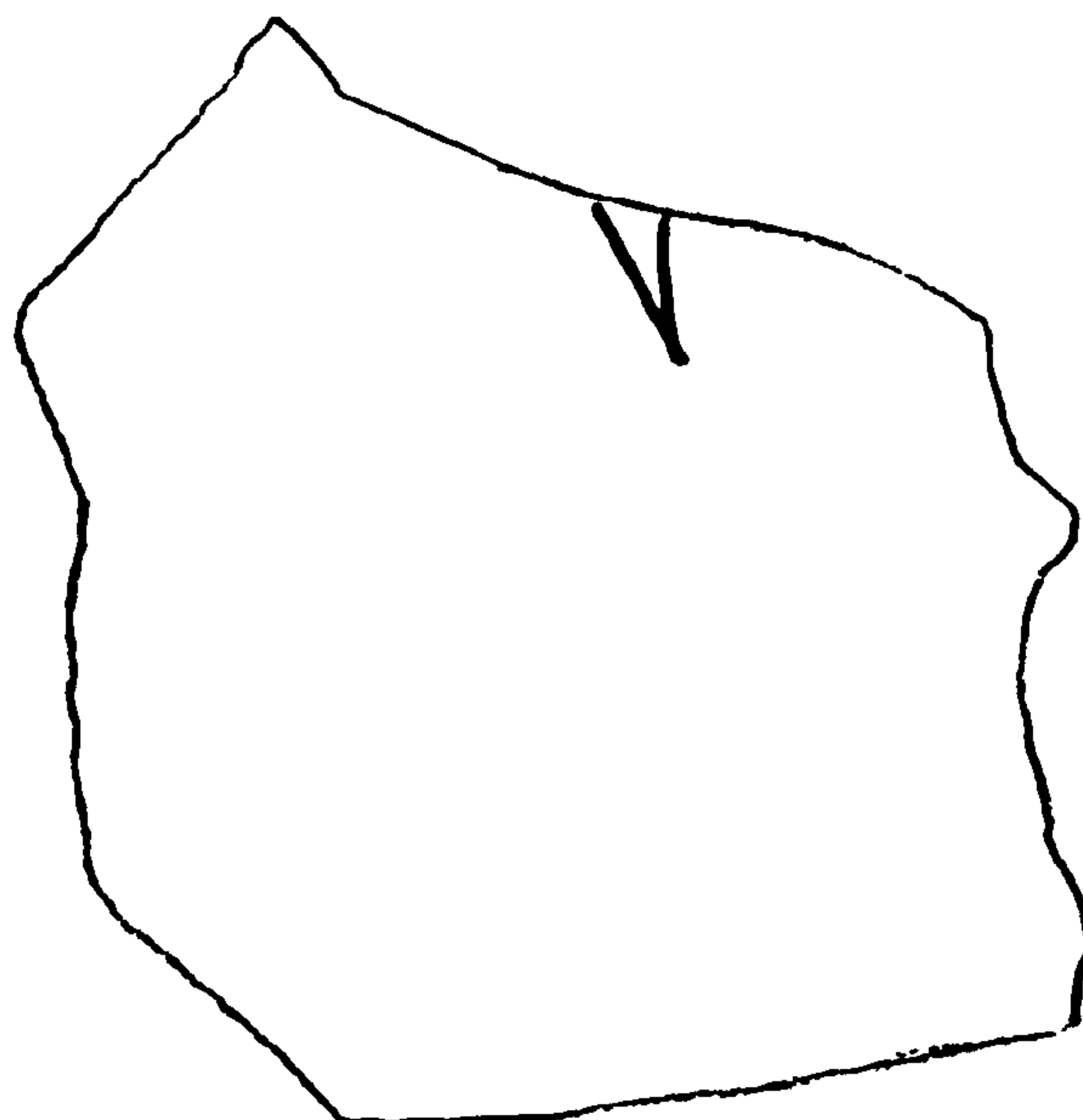
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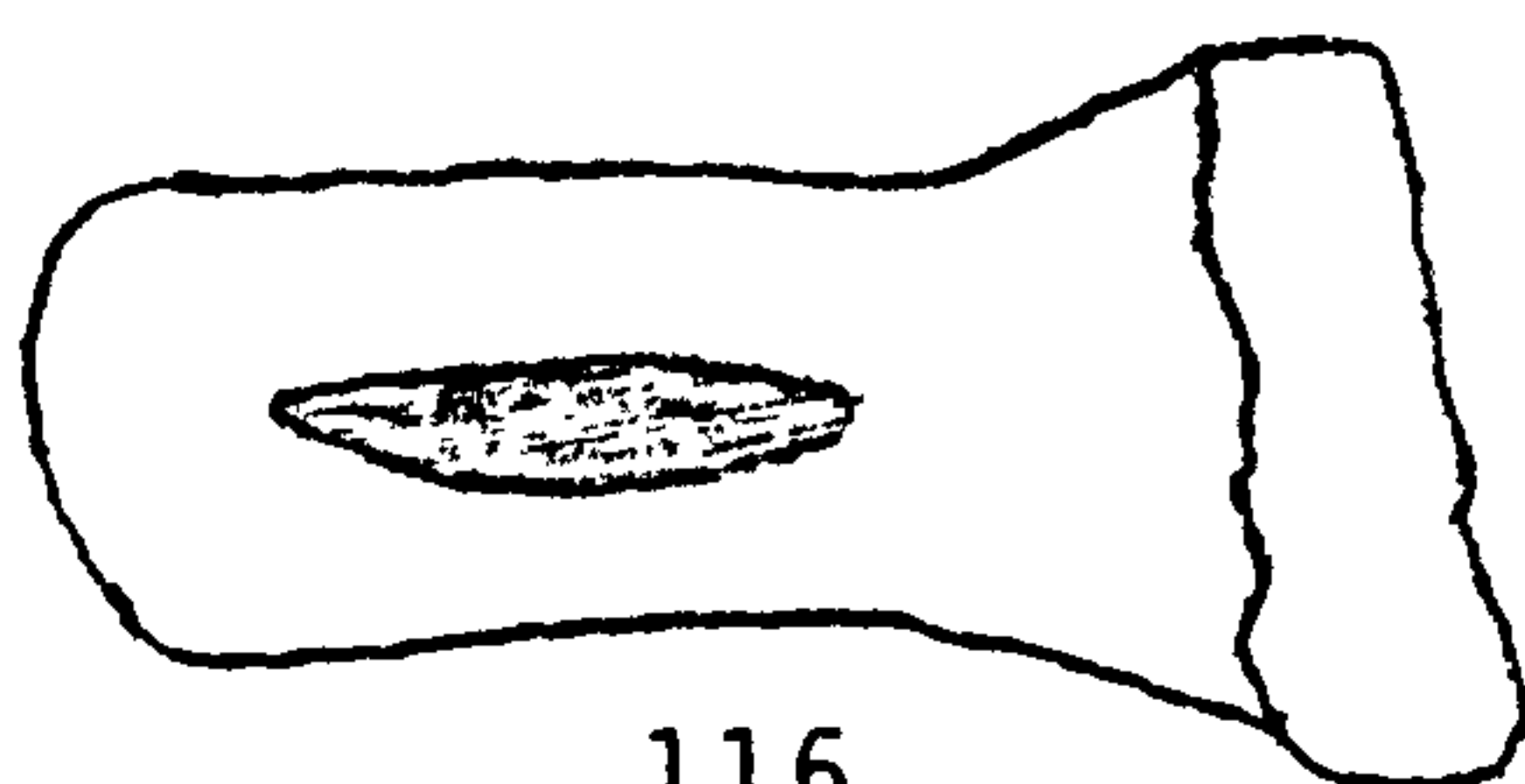
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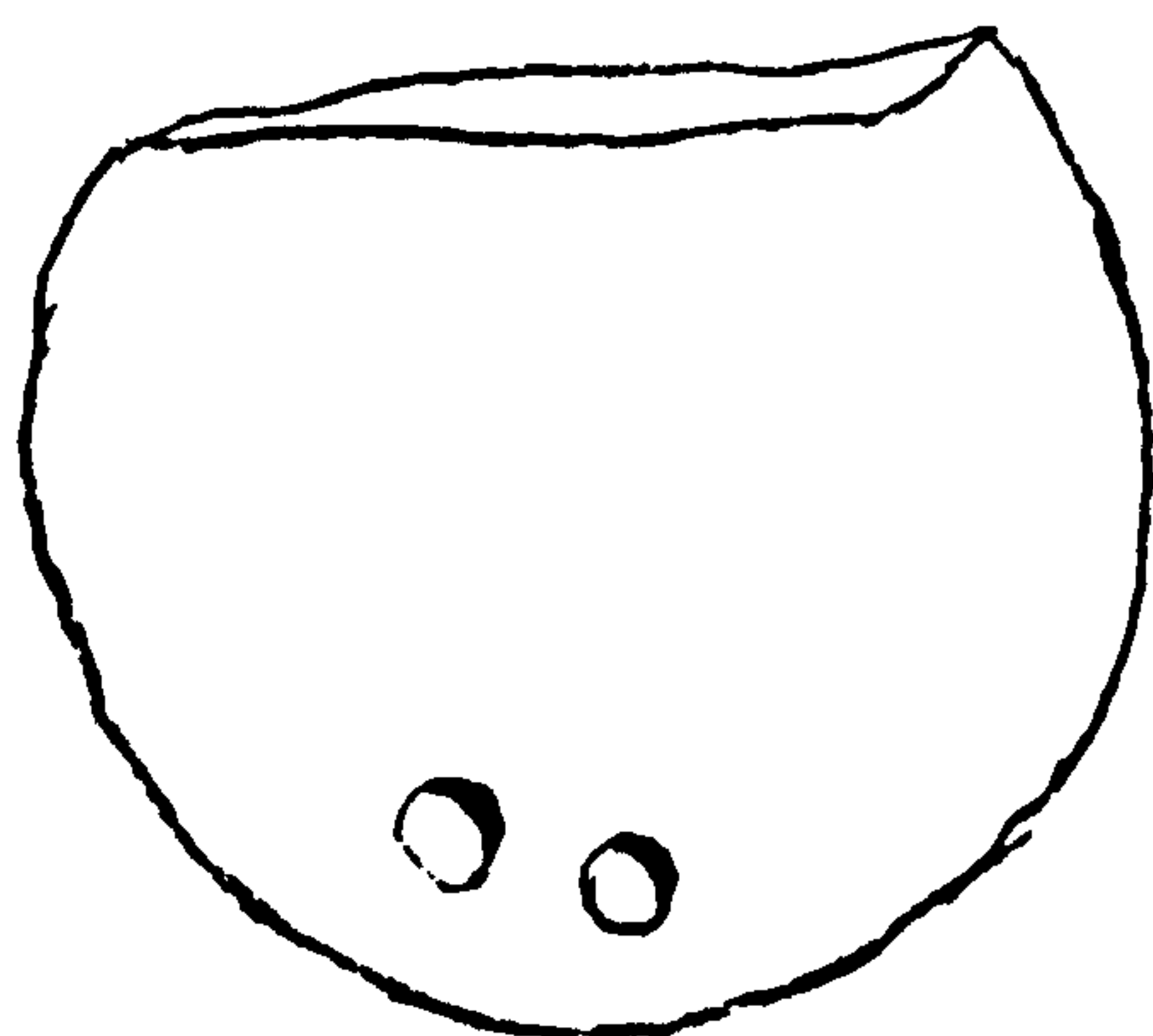
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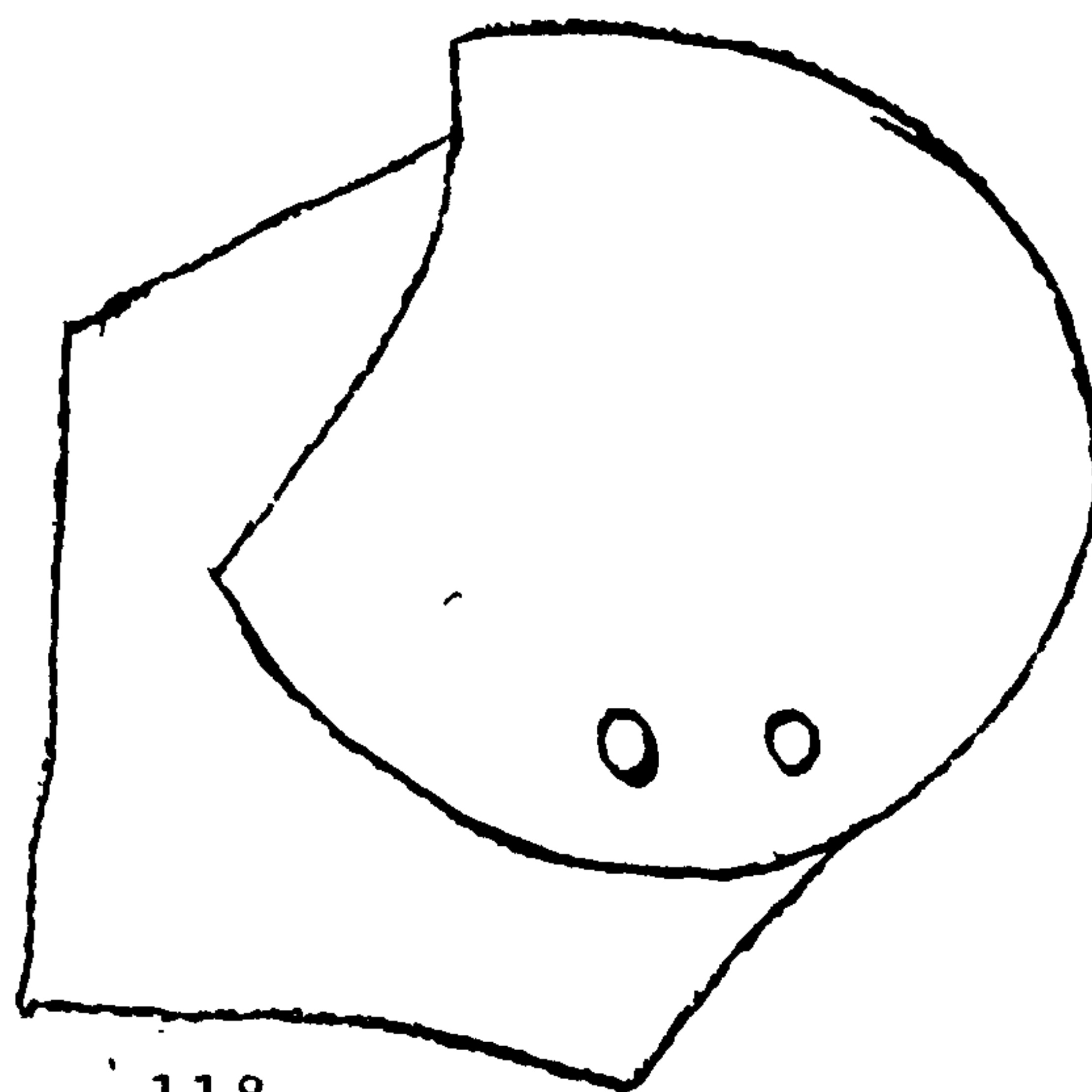
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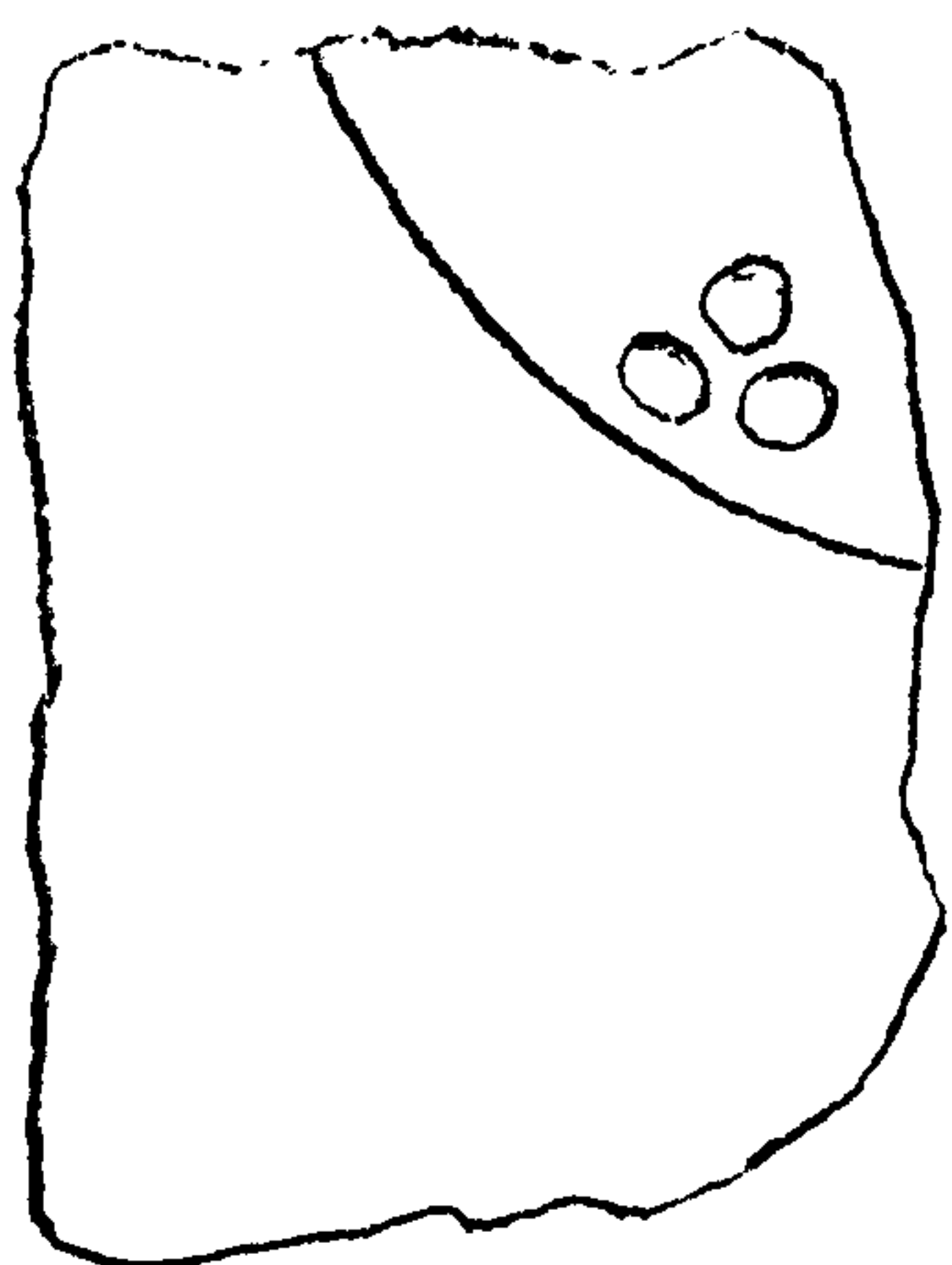


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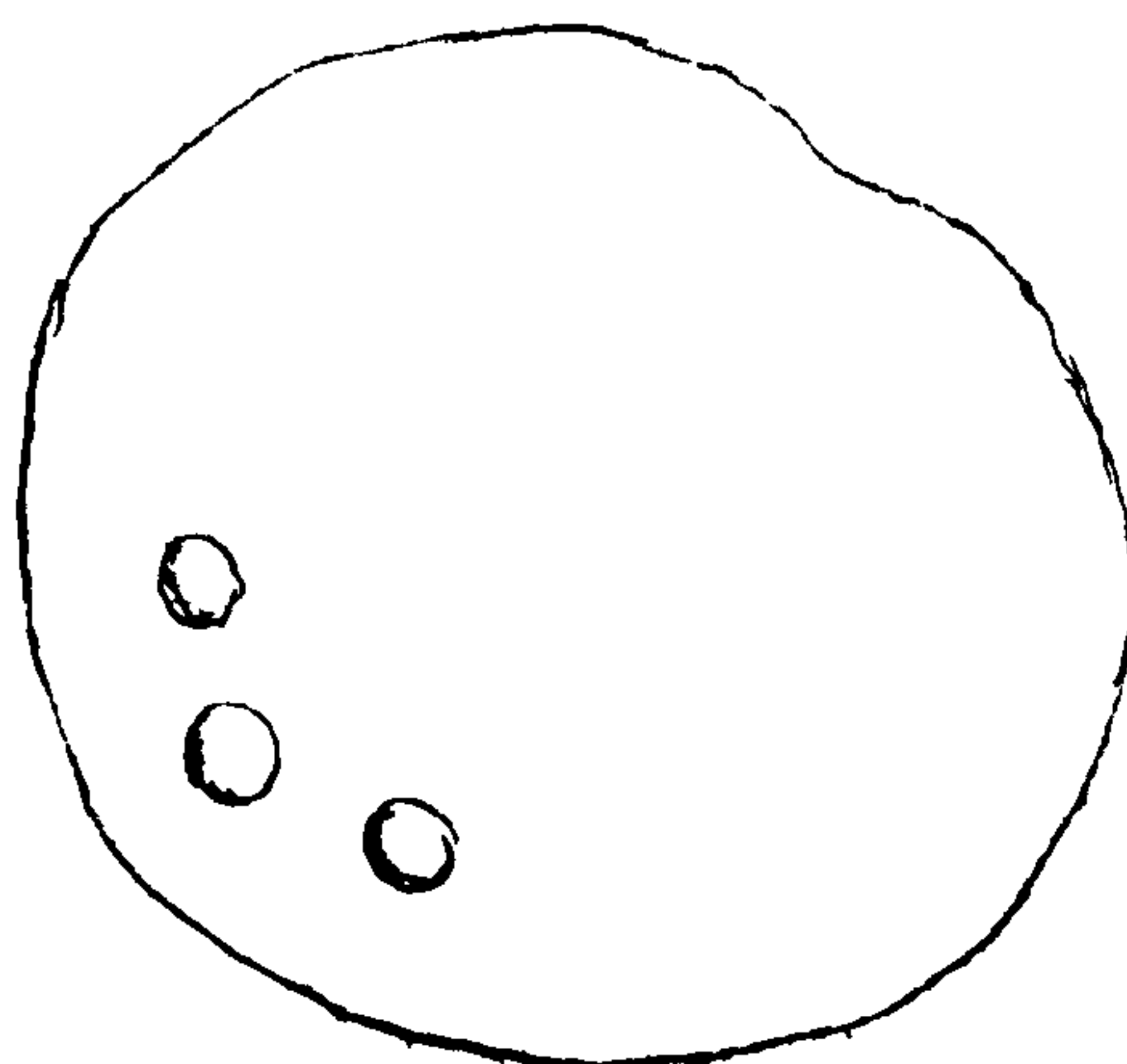


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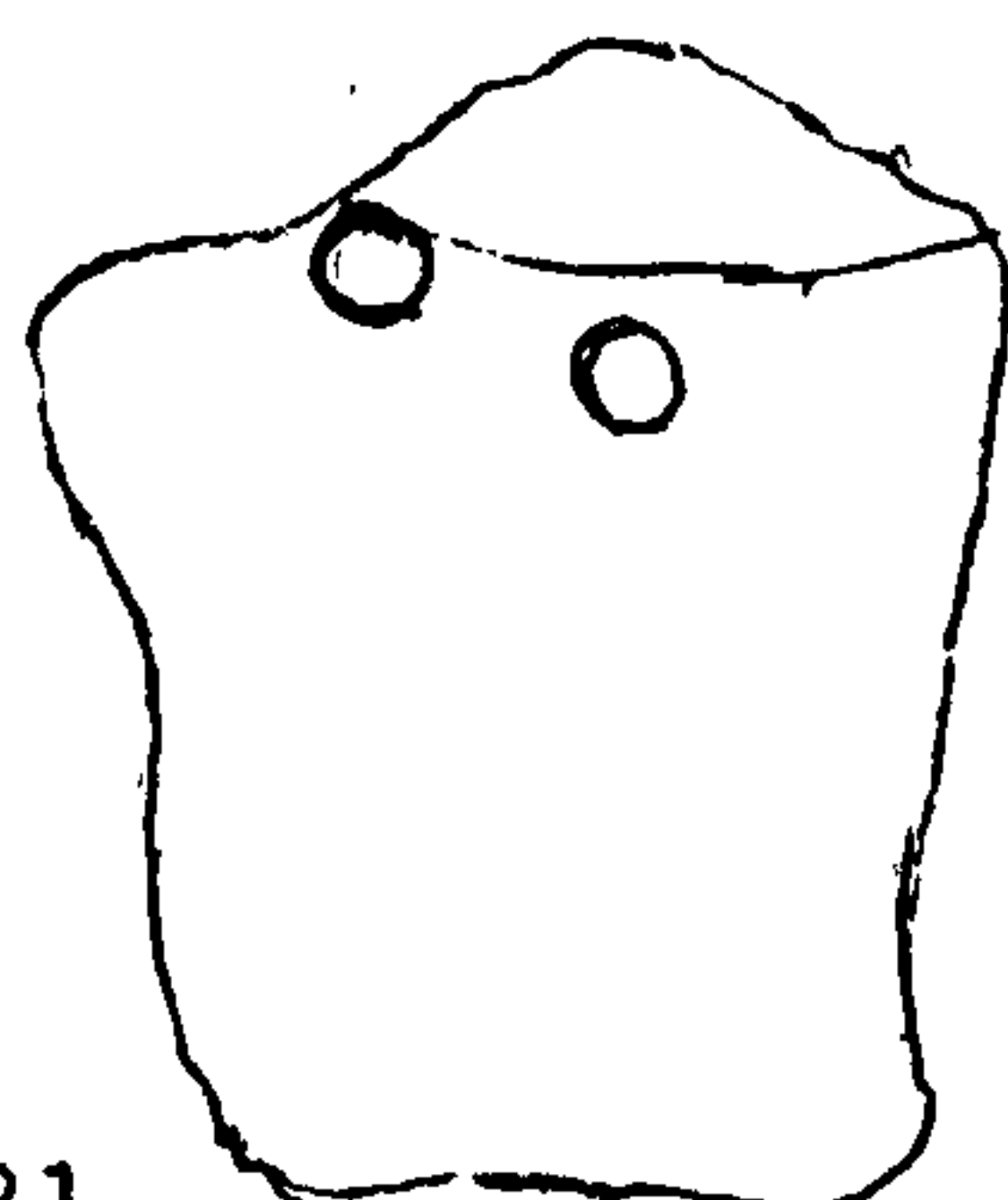
31. Phylakopi 1974-77 112-118. Scale 1:1



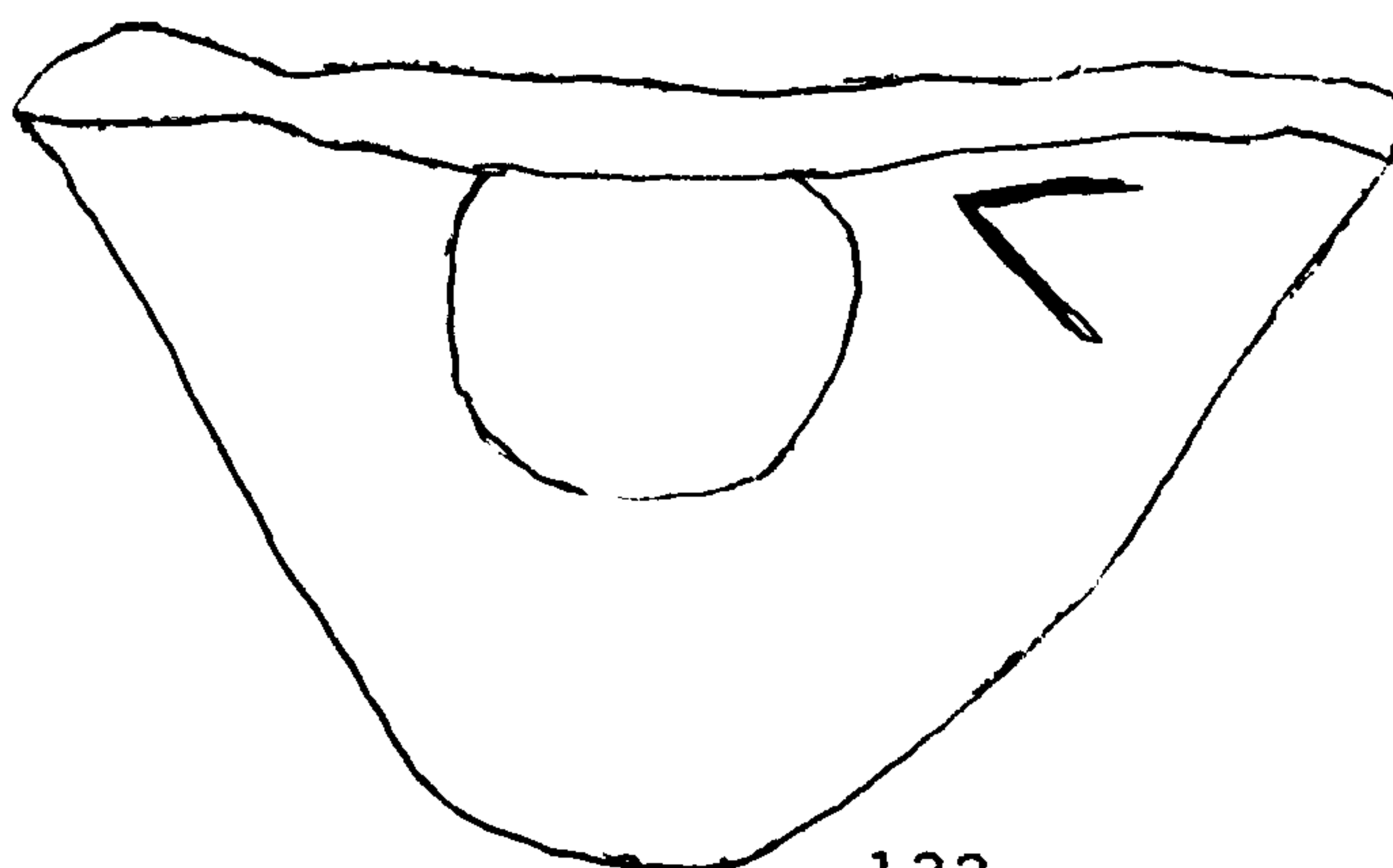
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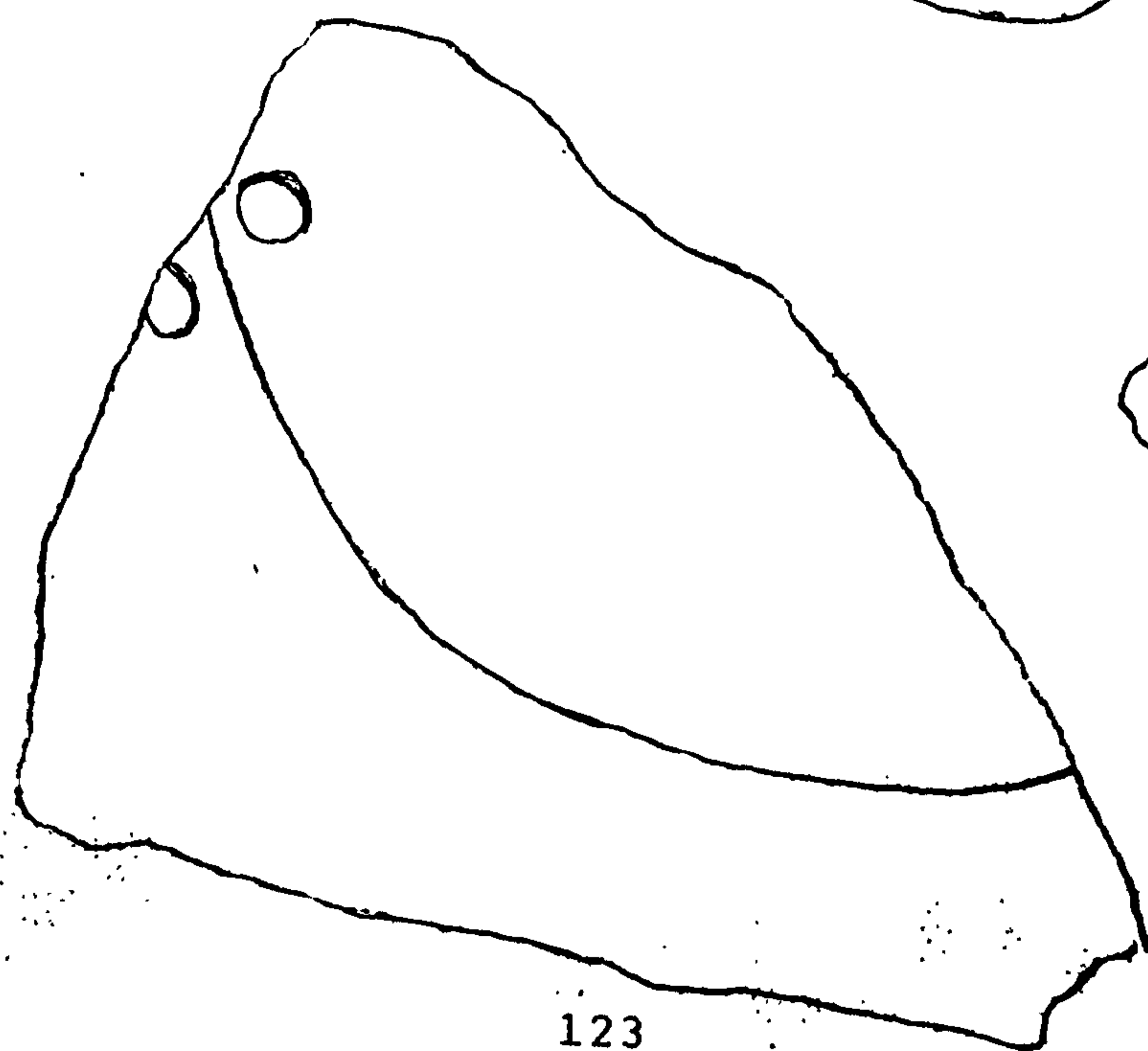
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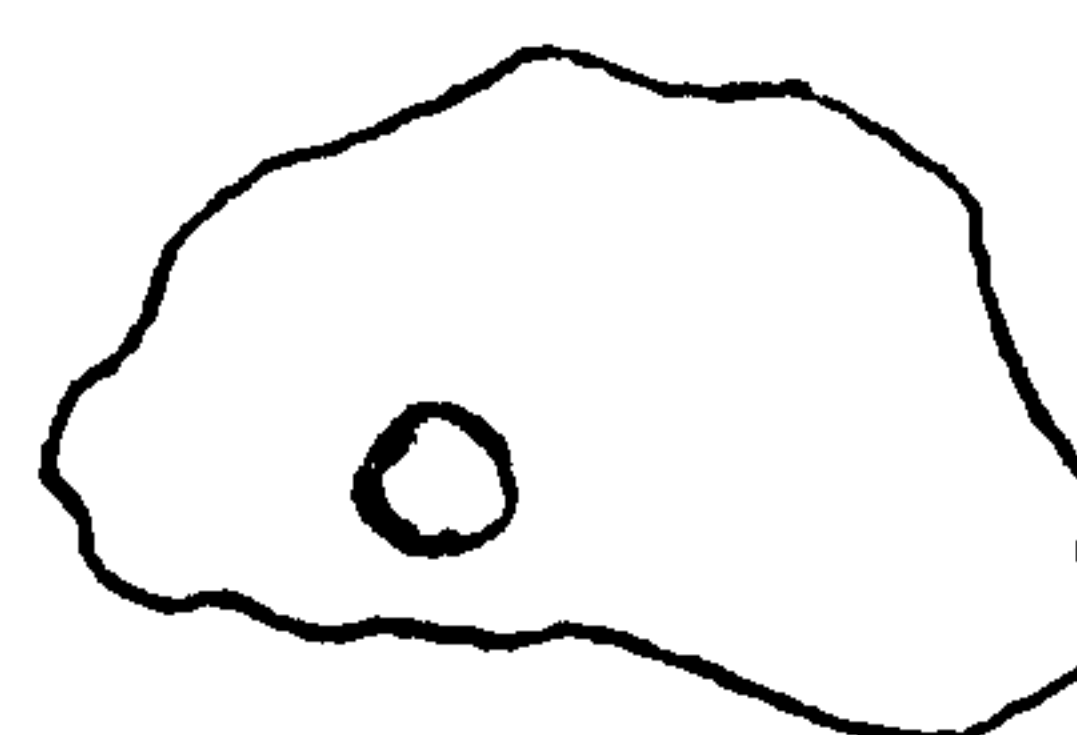
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122

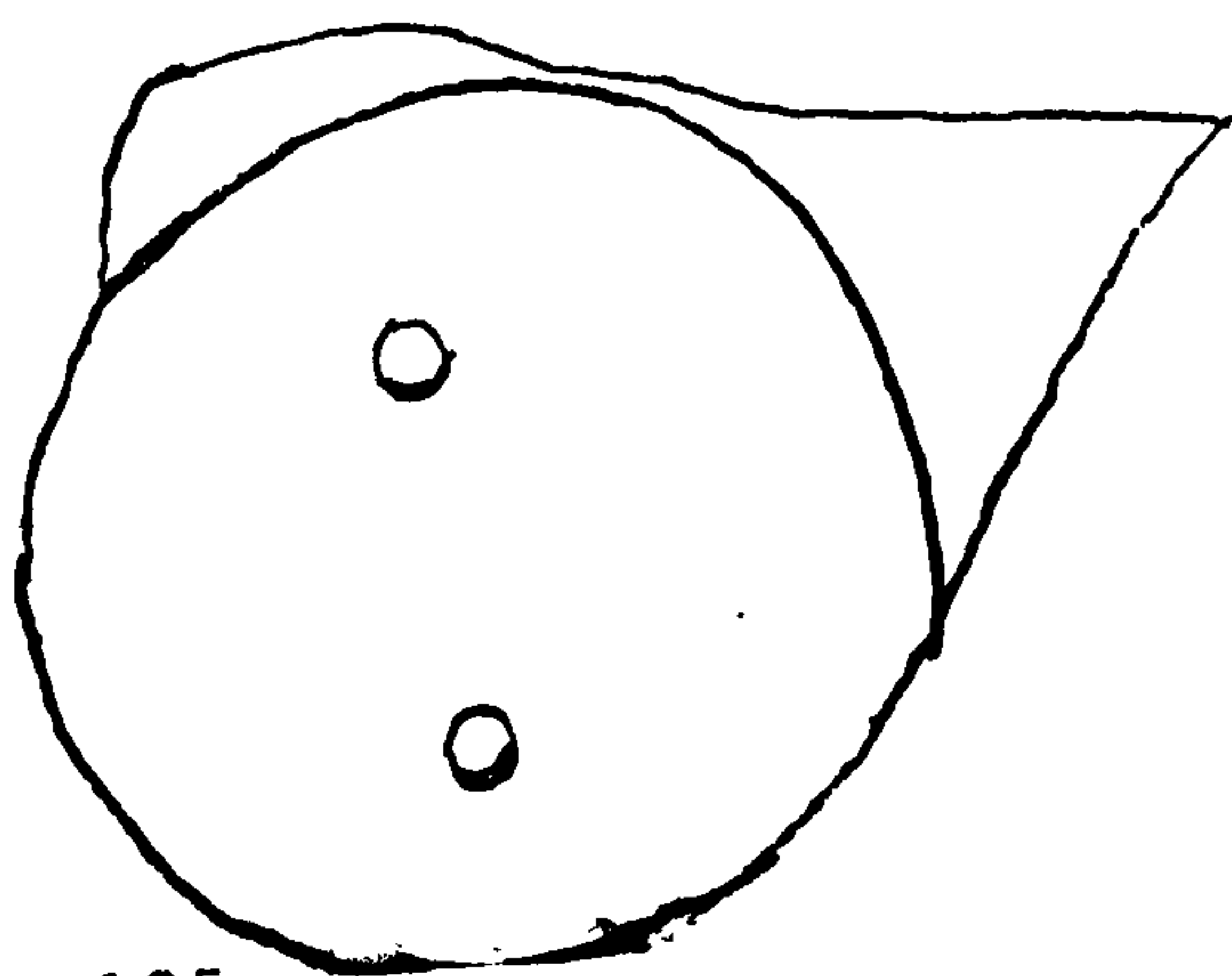


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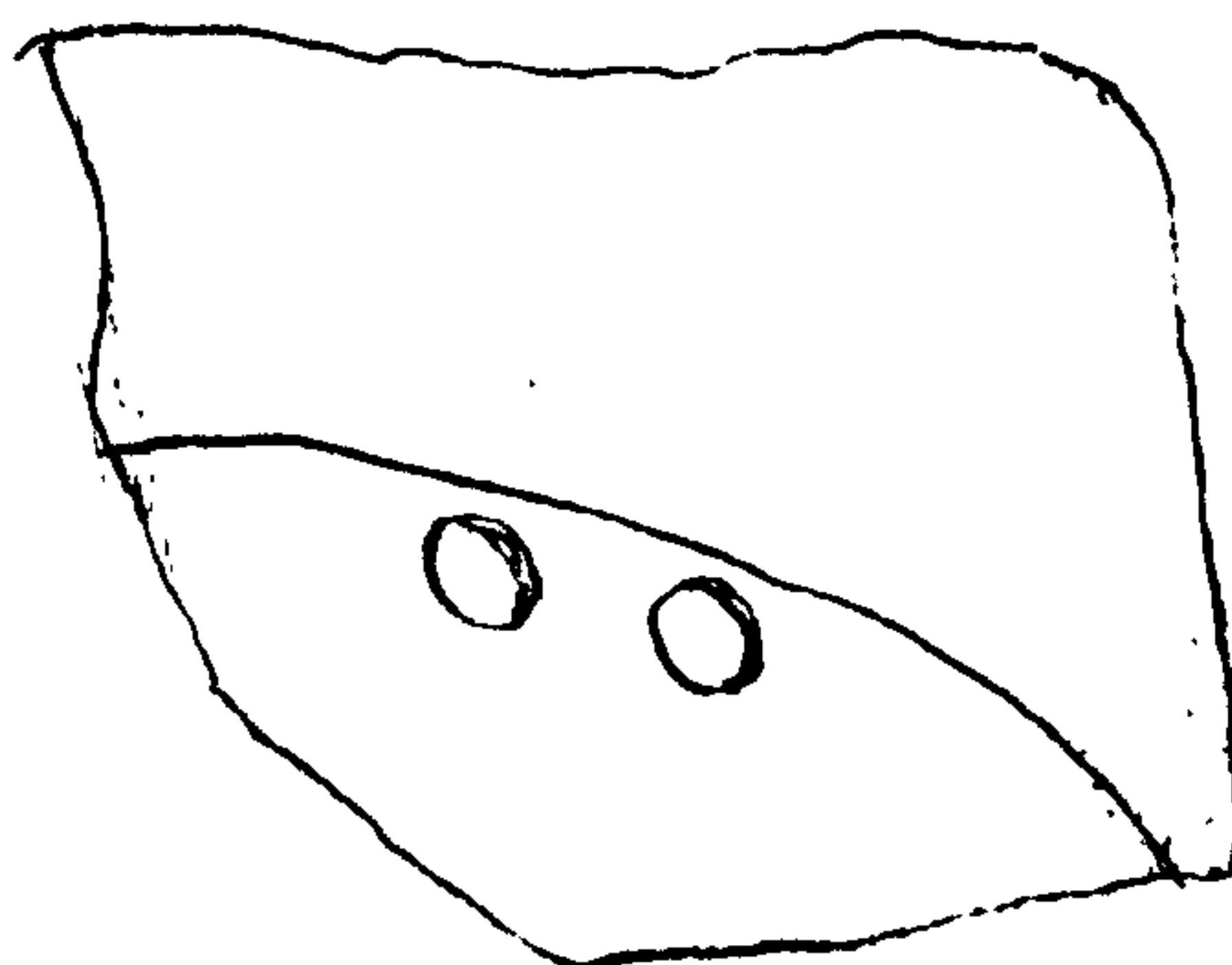


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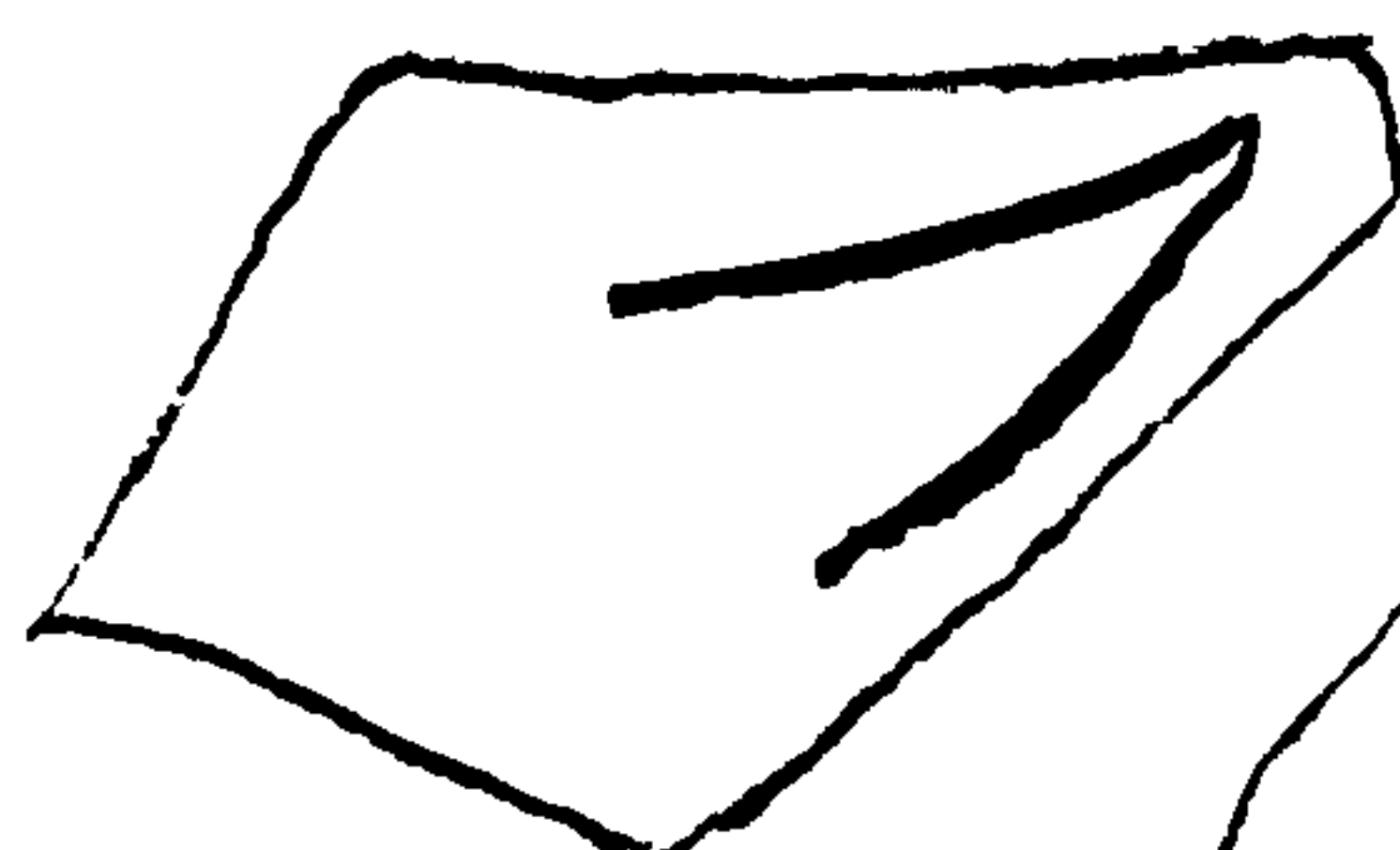
32. Phylakopi 1974-77 119-124. Scale 1:1



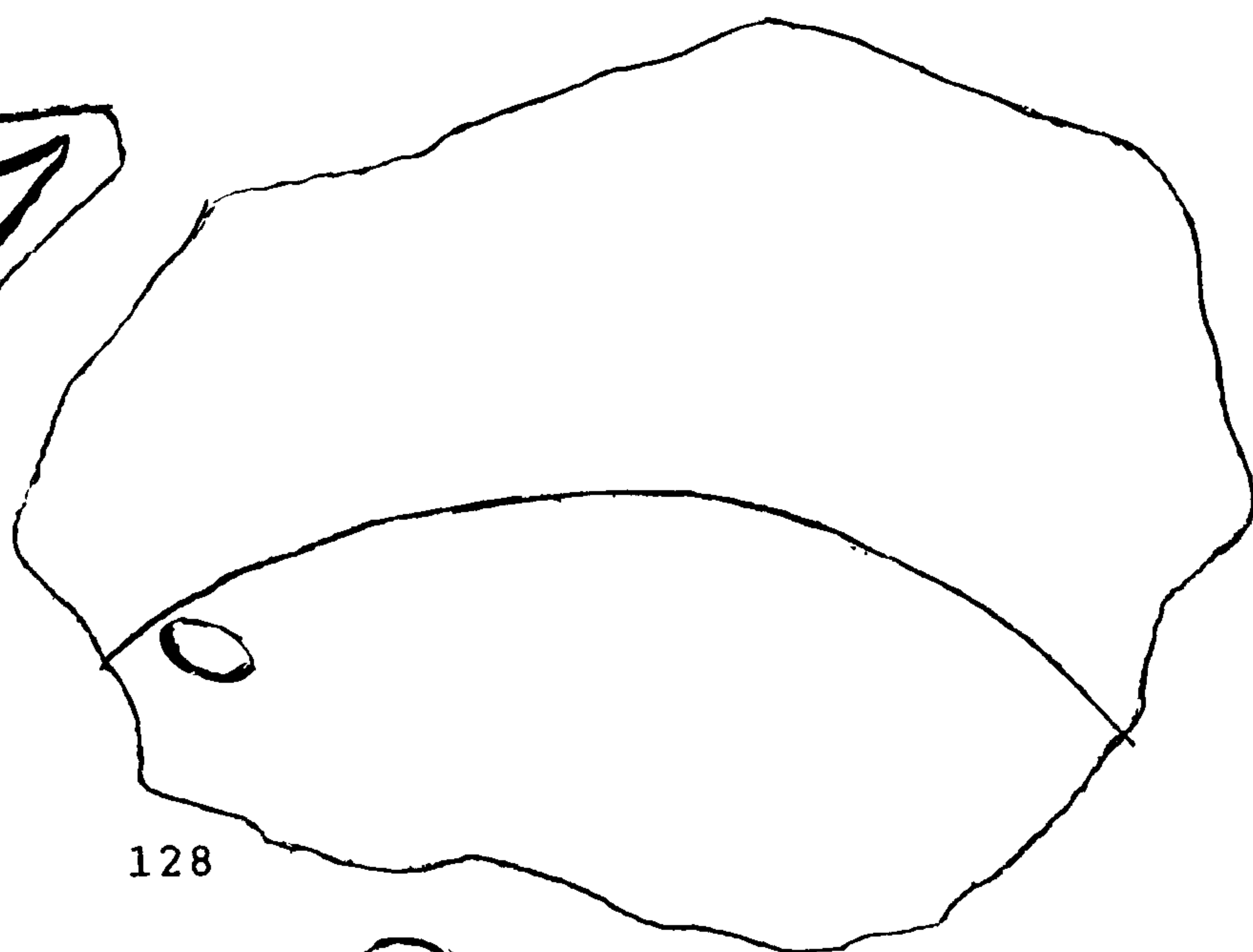
125



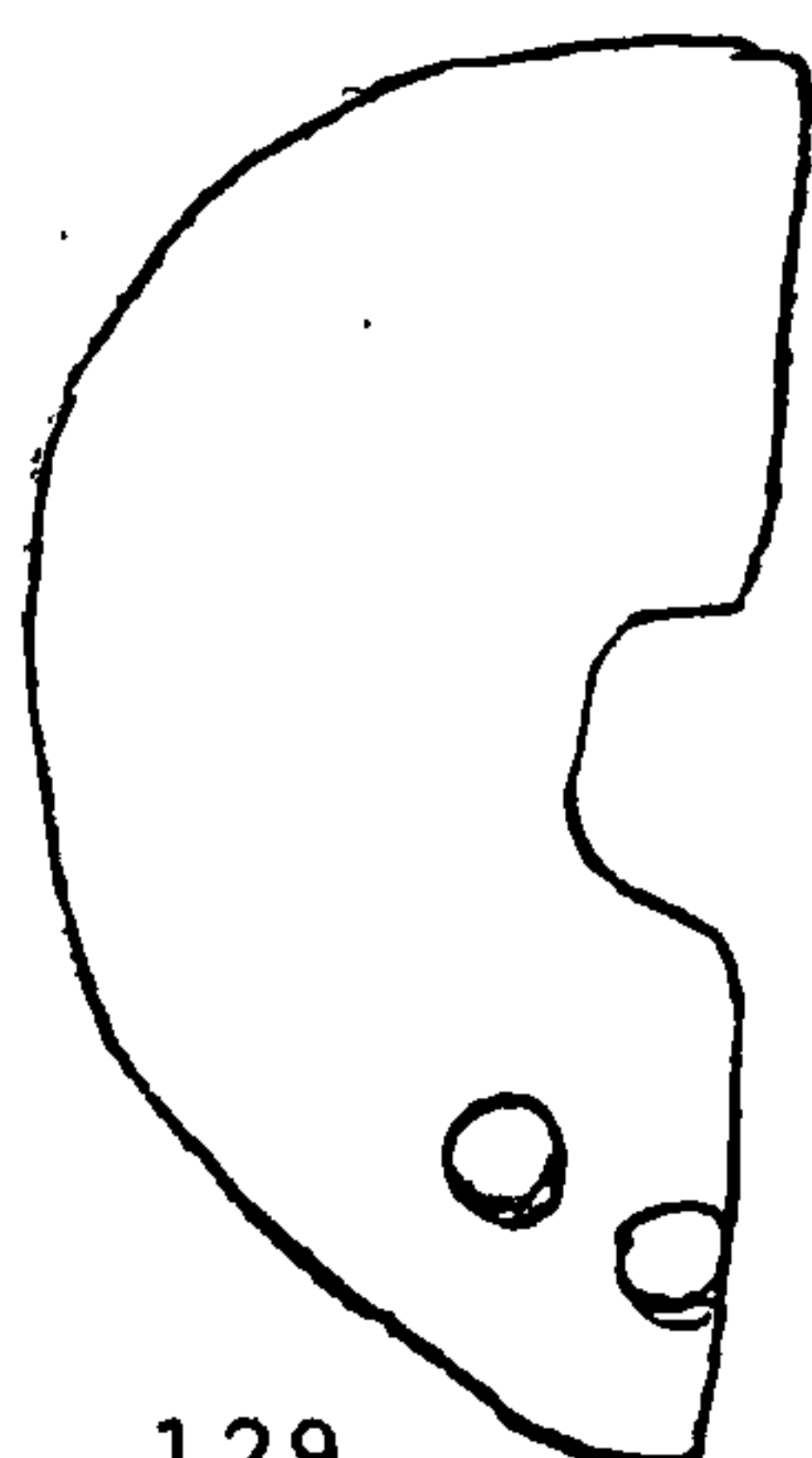
126



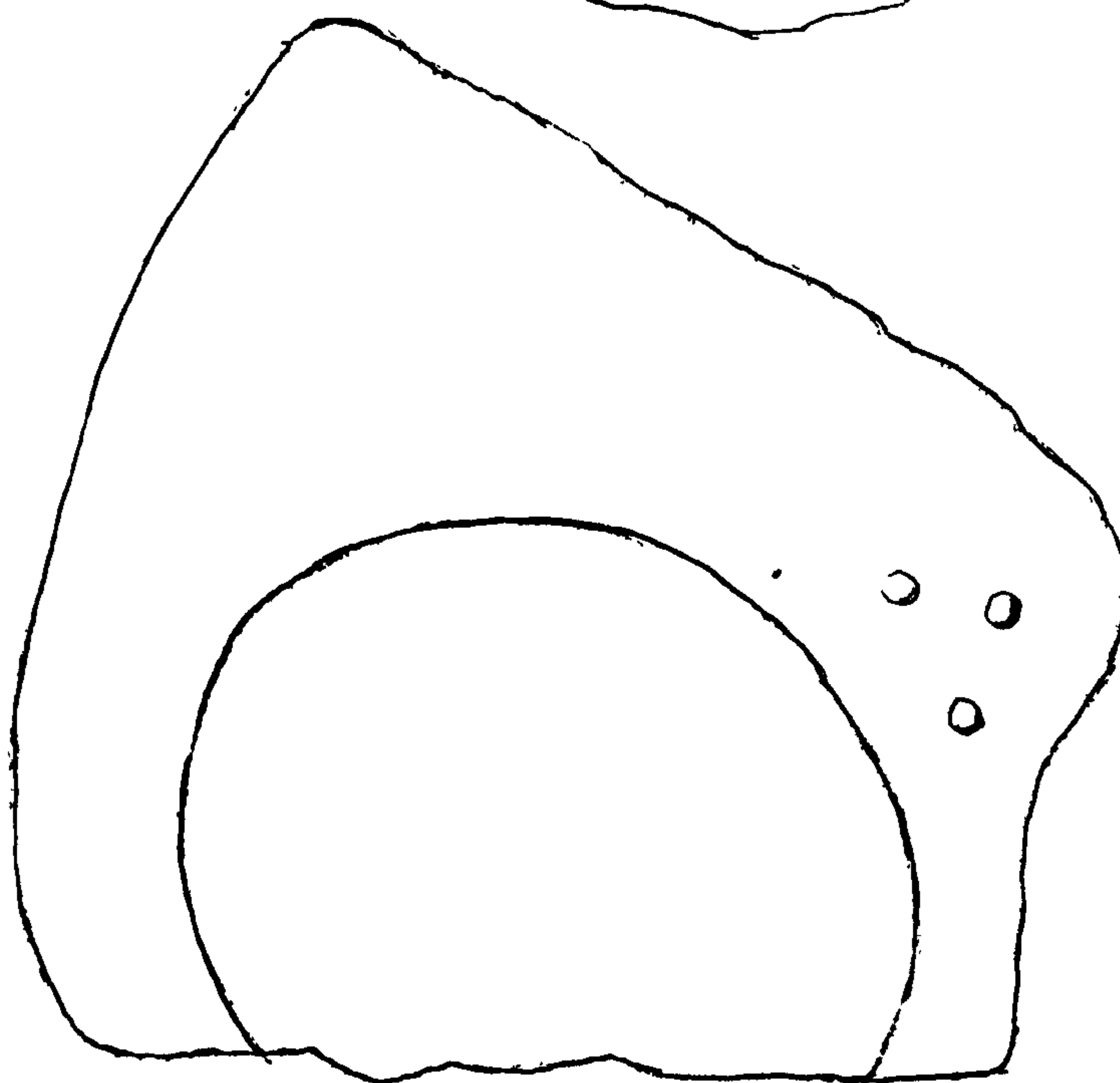
127



128

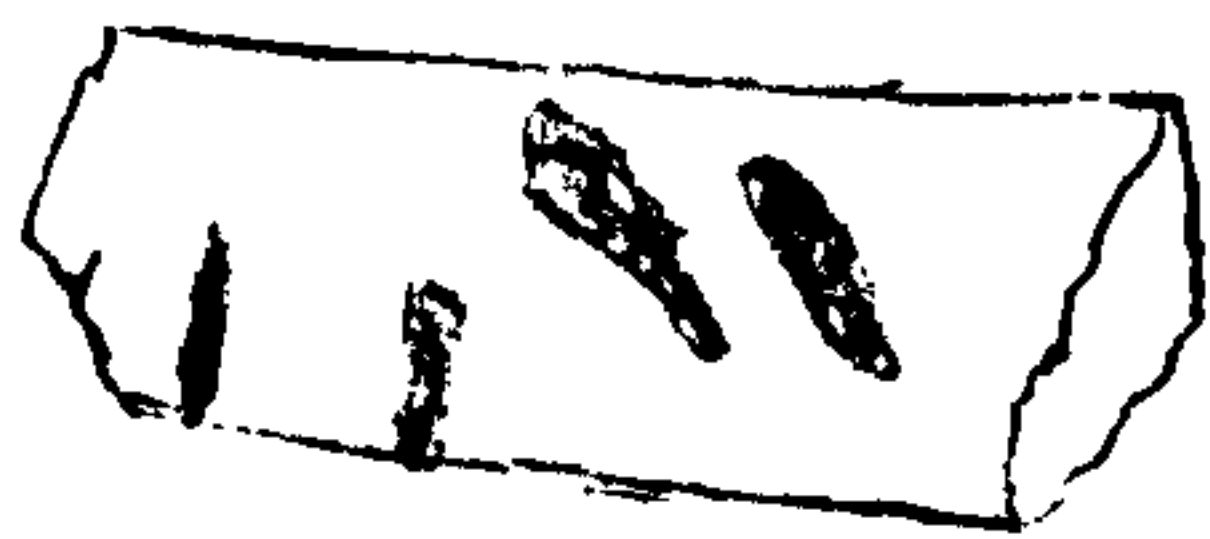


129

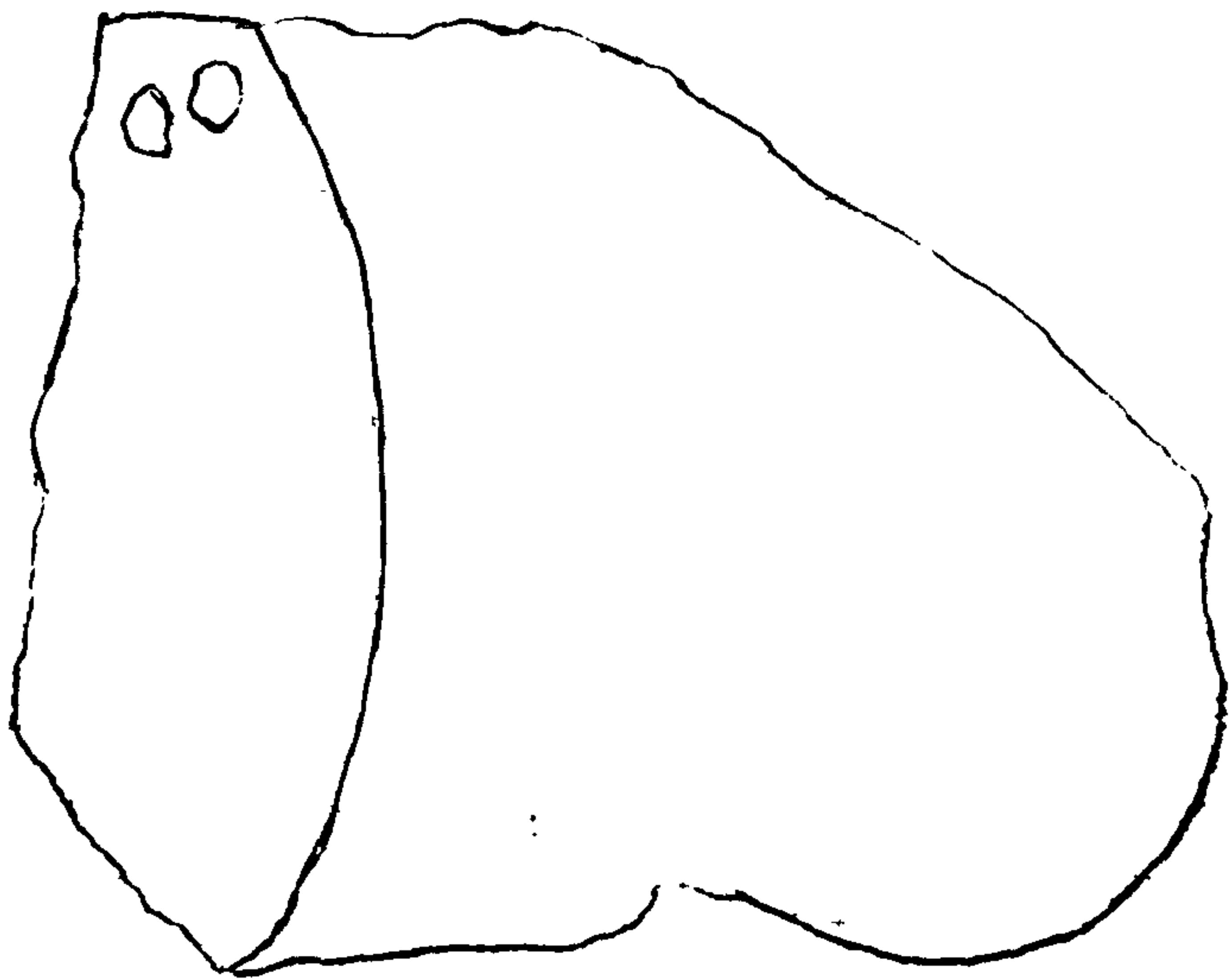


130

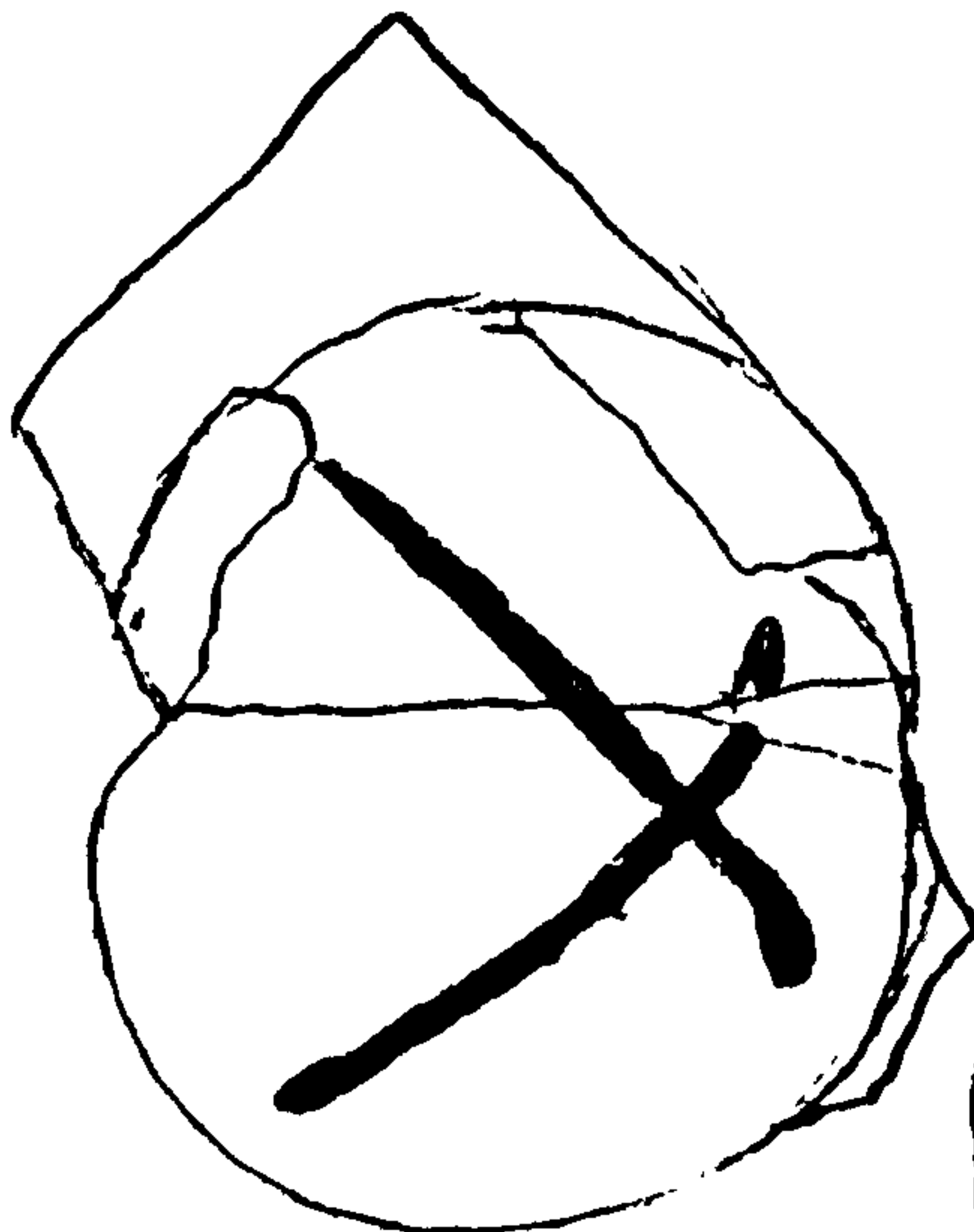
33. Phylakopi 1974-77 125-130. Scale 1:1



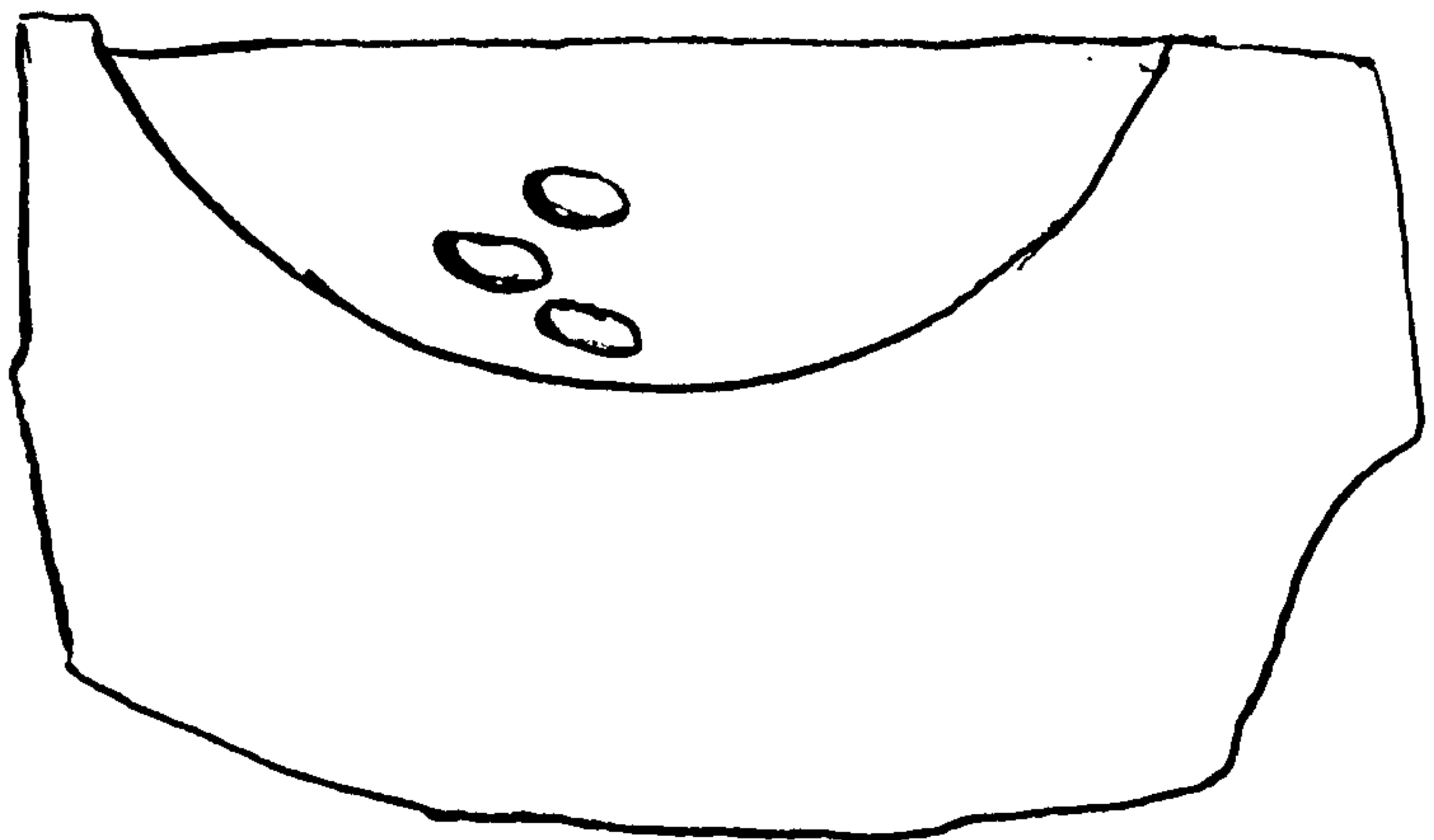
131



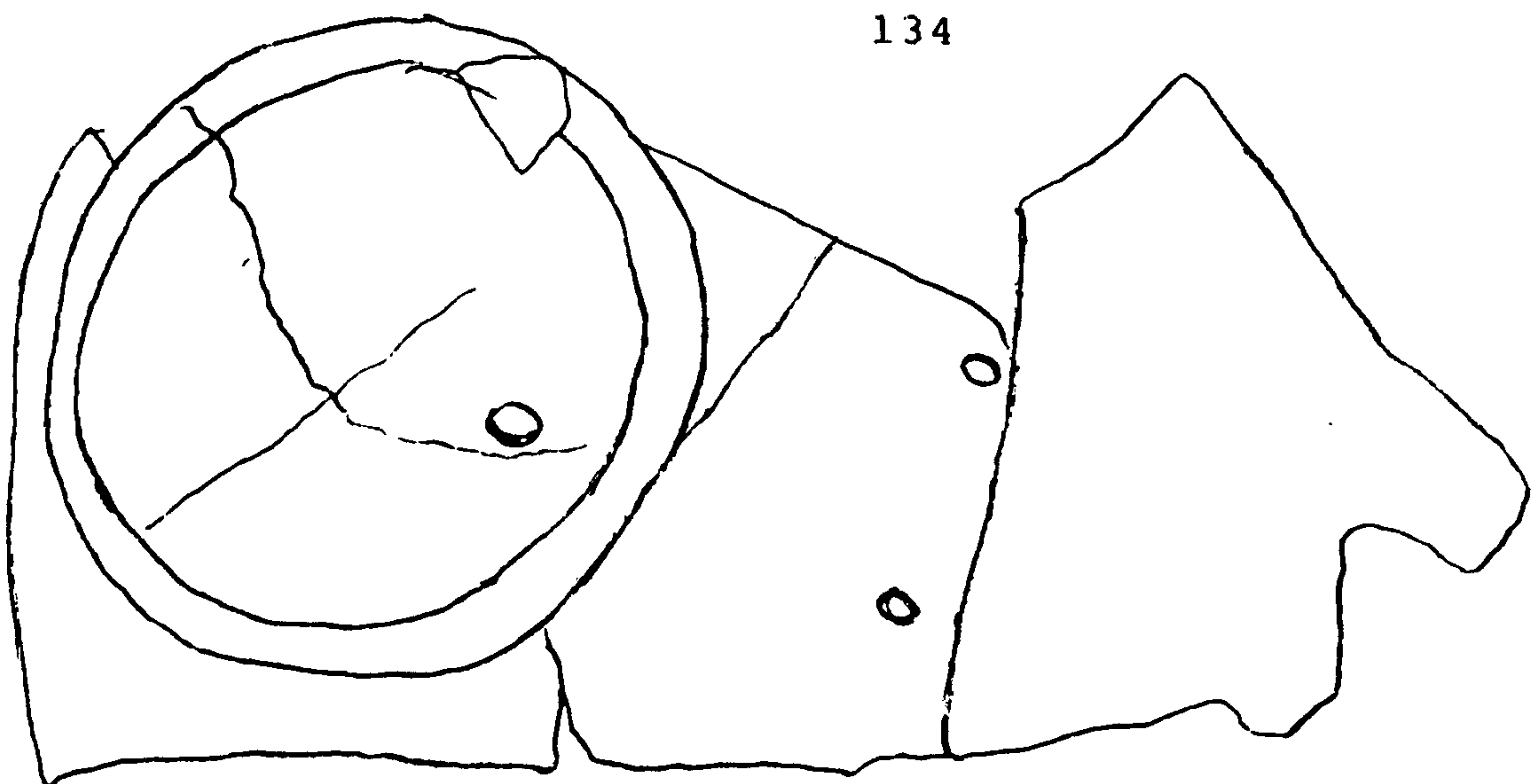
132



133

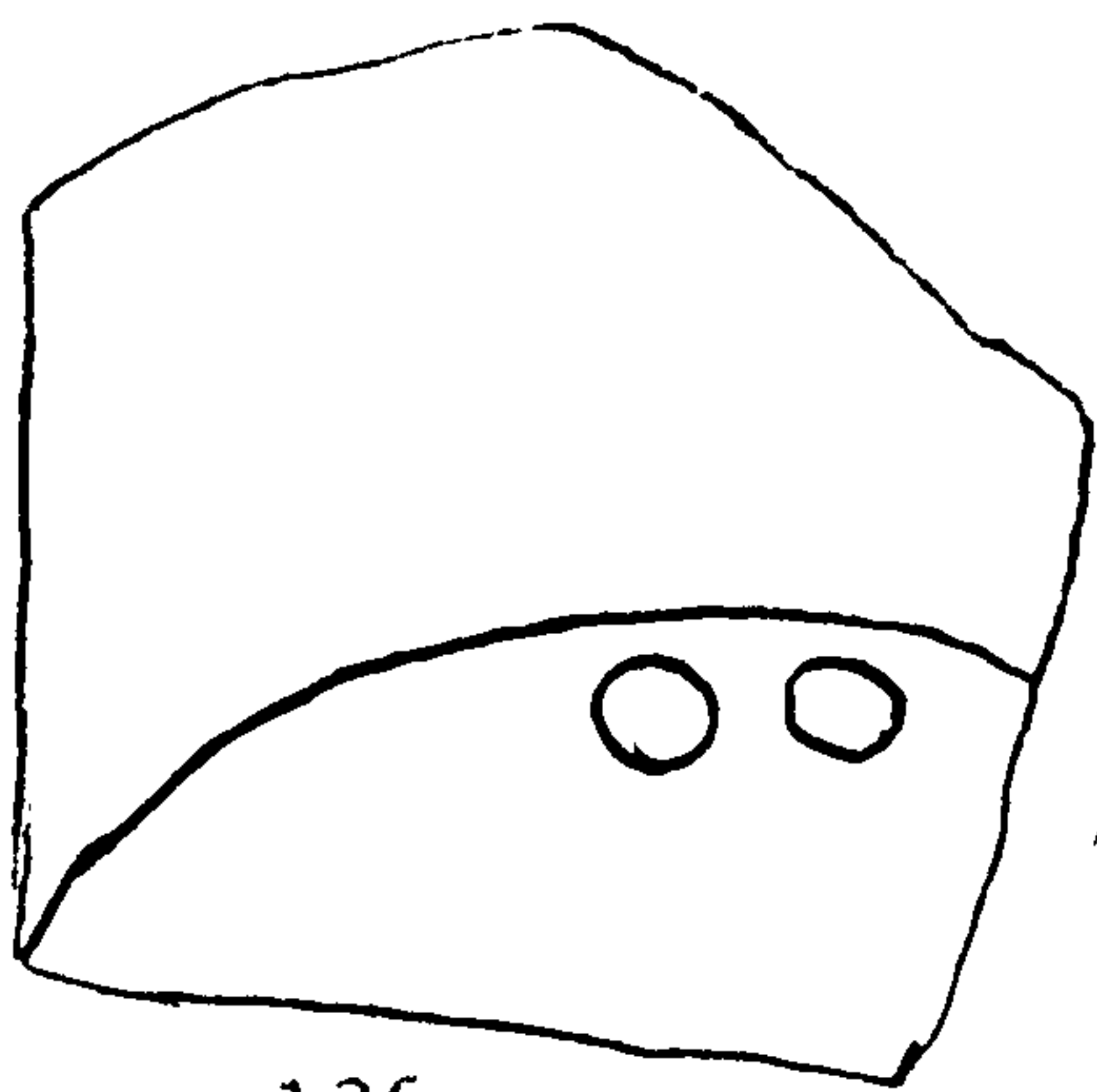


134

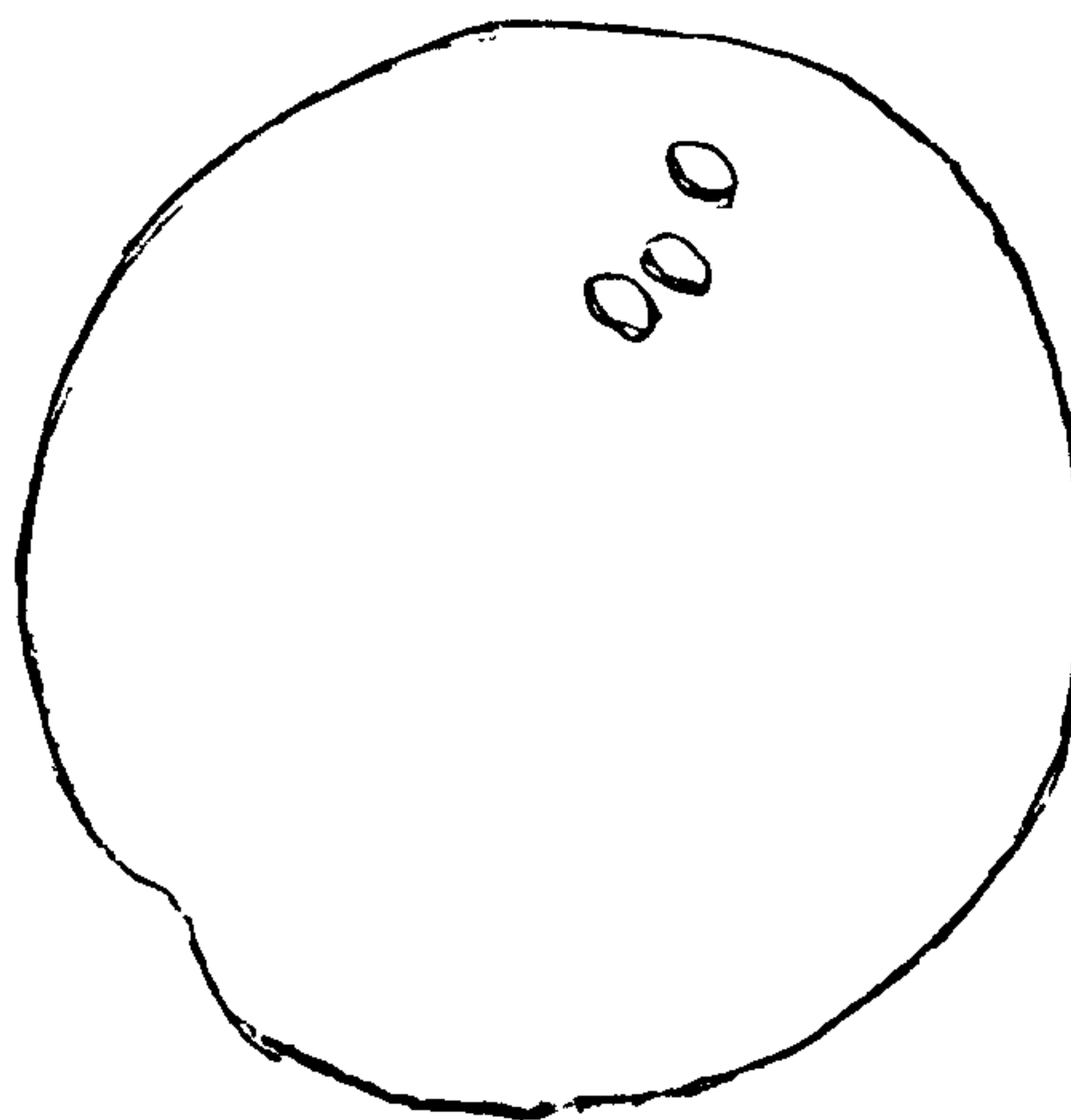


135

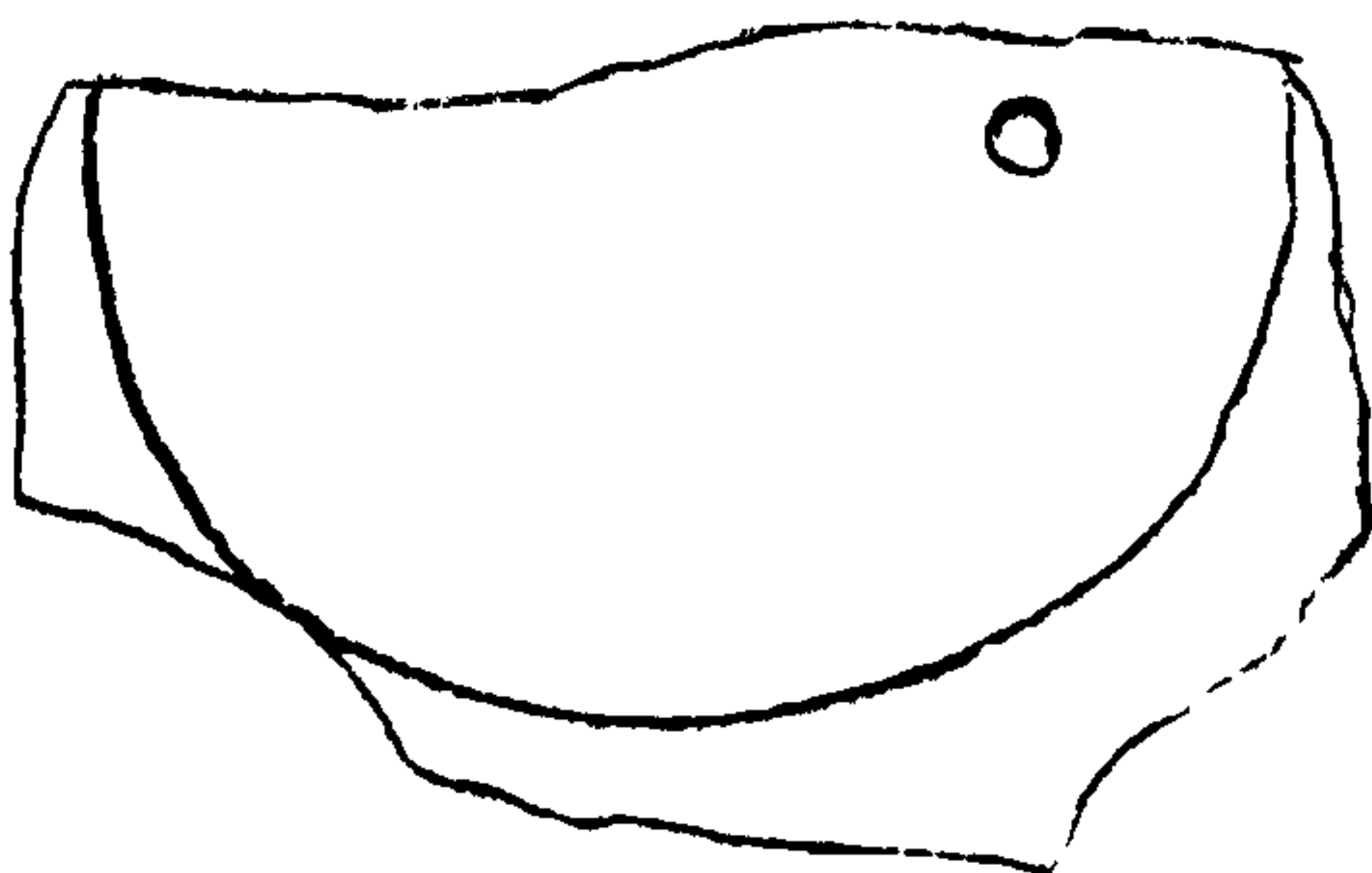
34. Phylakopi 1974-77 131-135. Scale 1:1



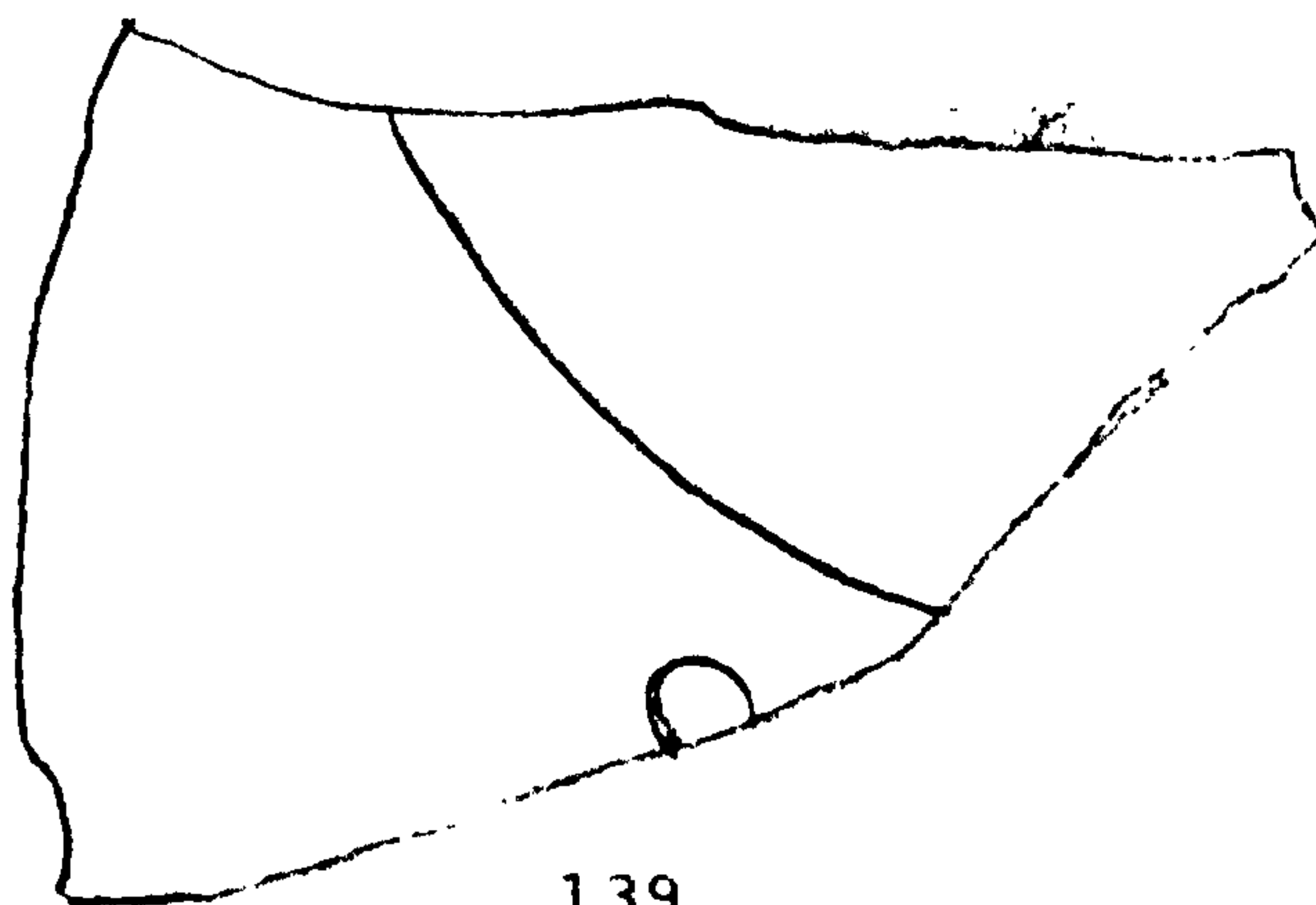
136



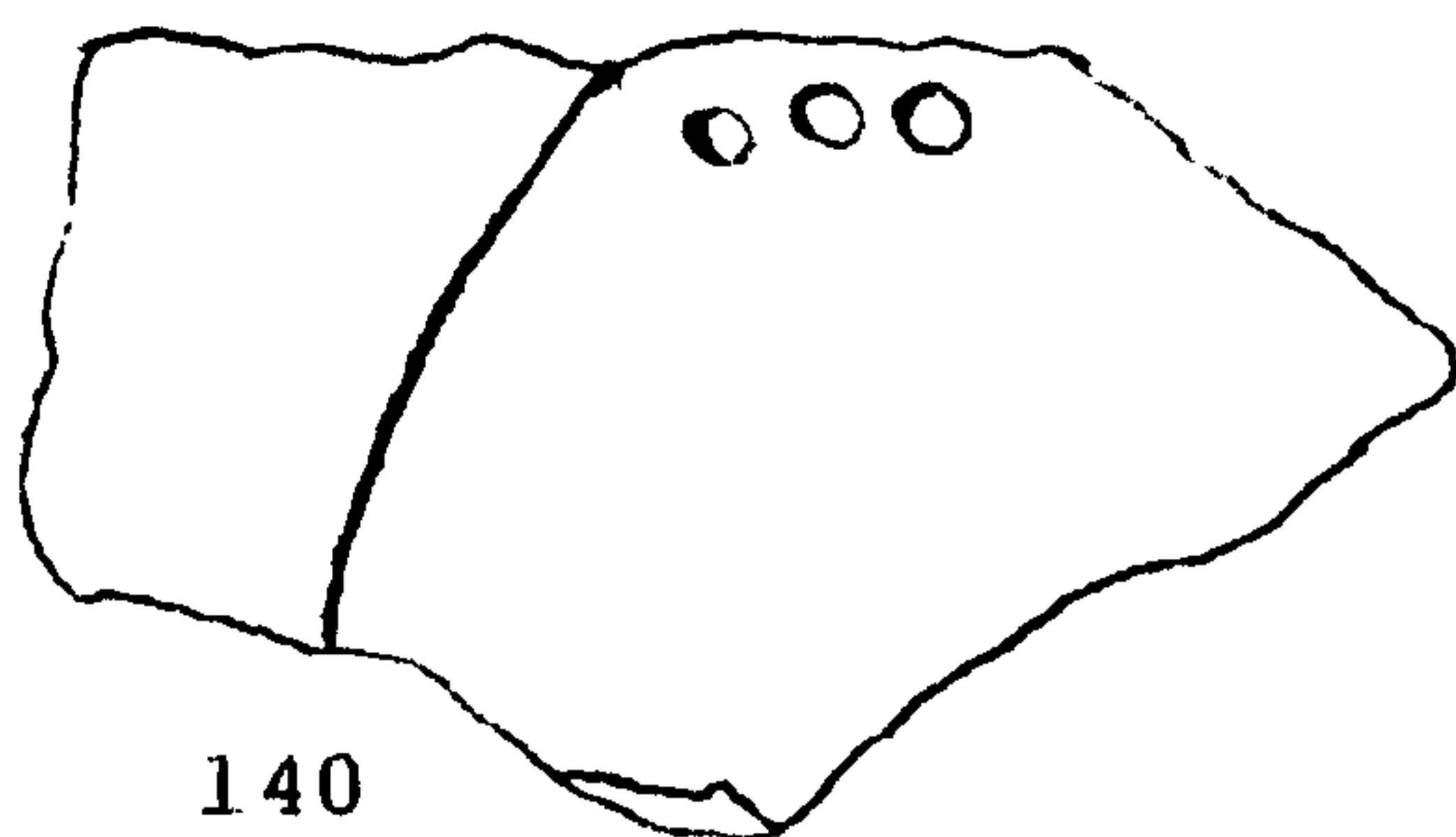
137



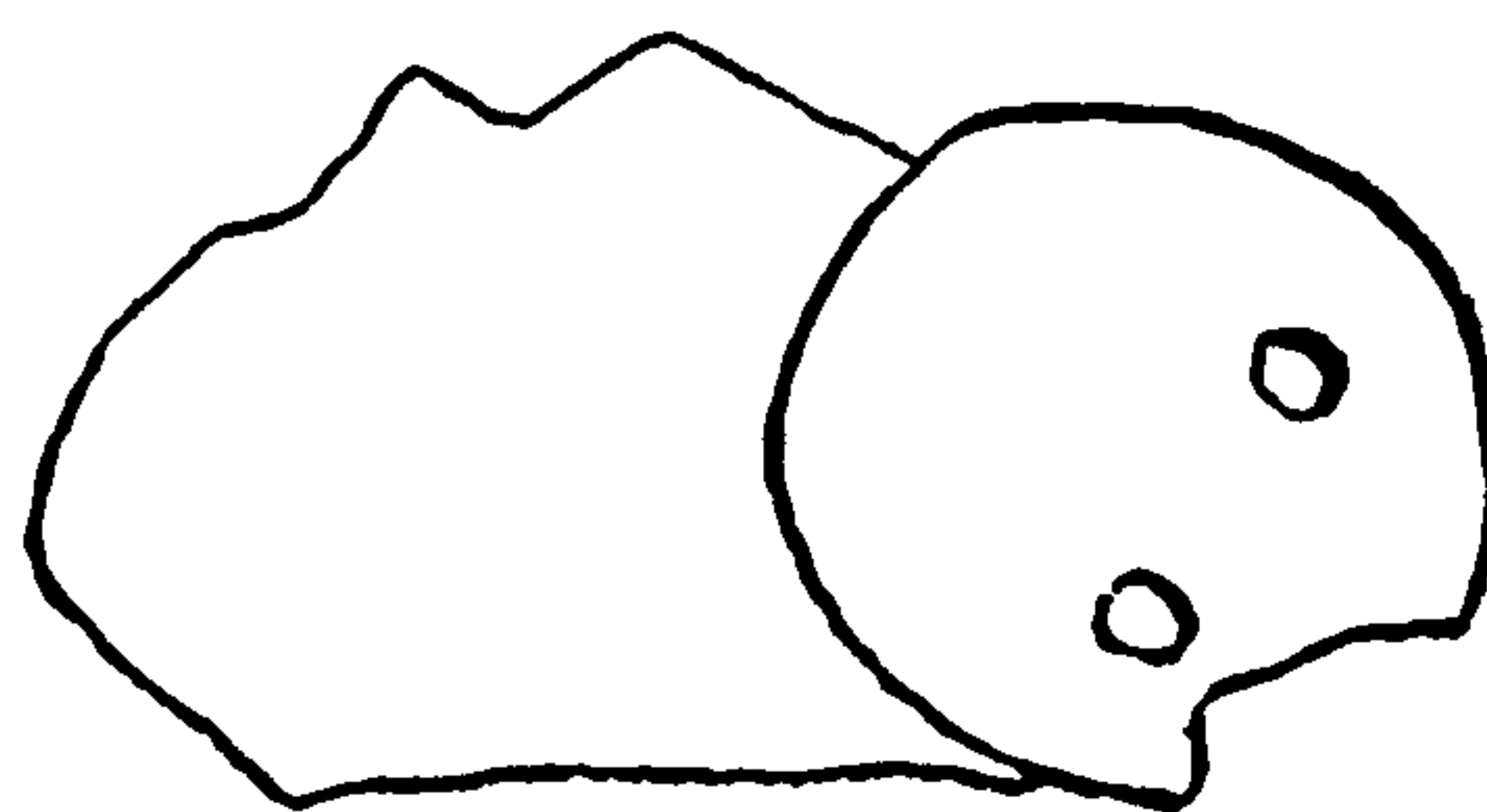
138



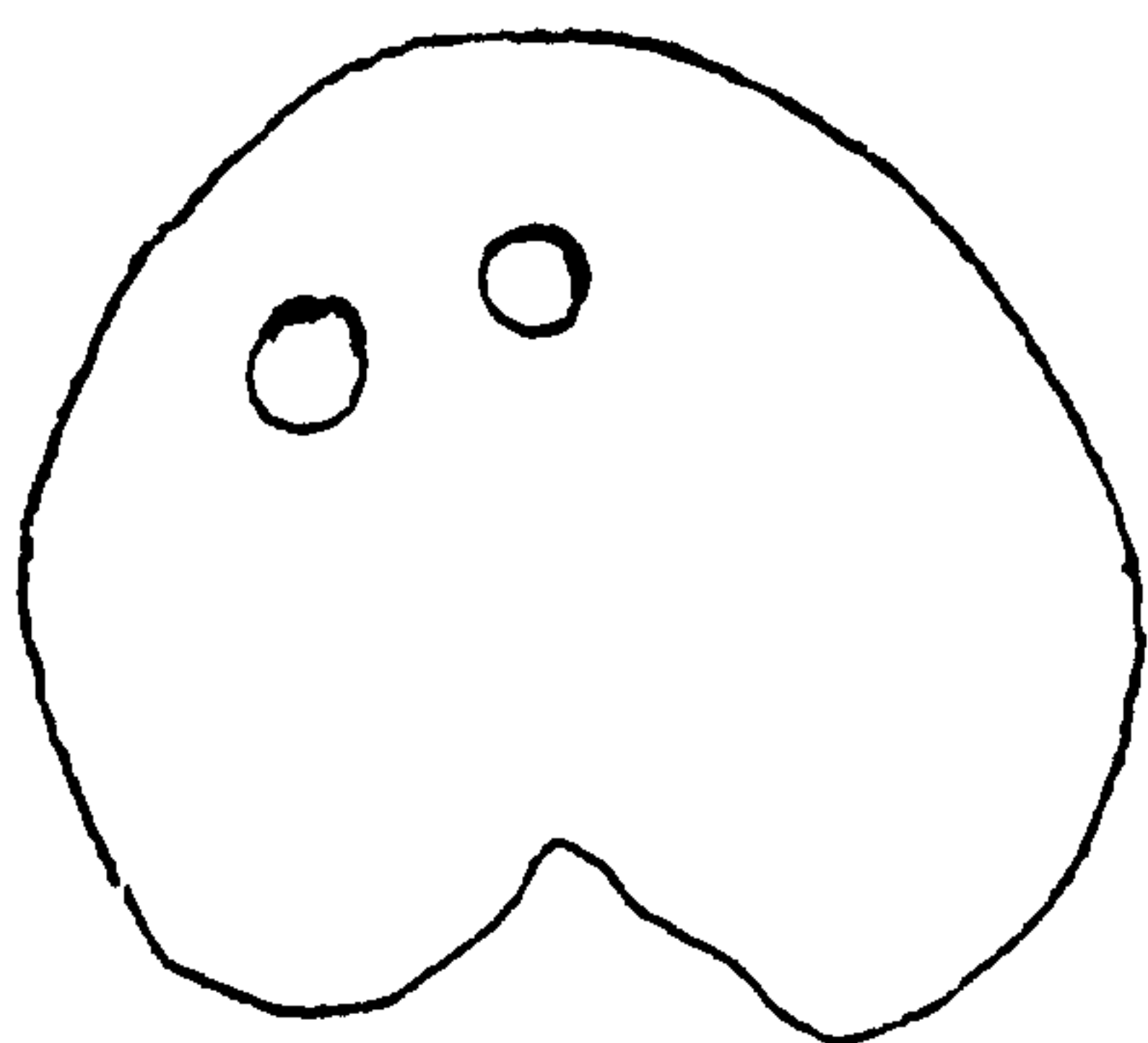
139



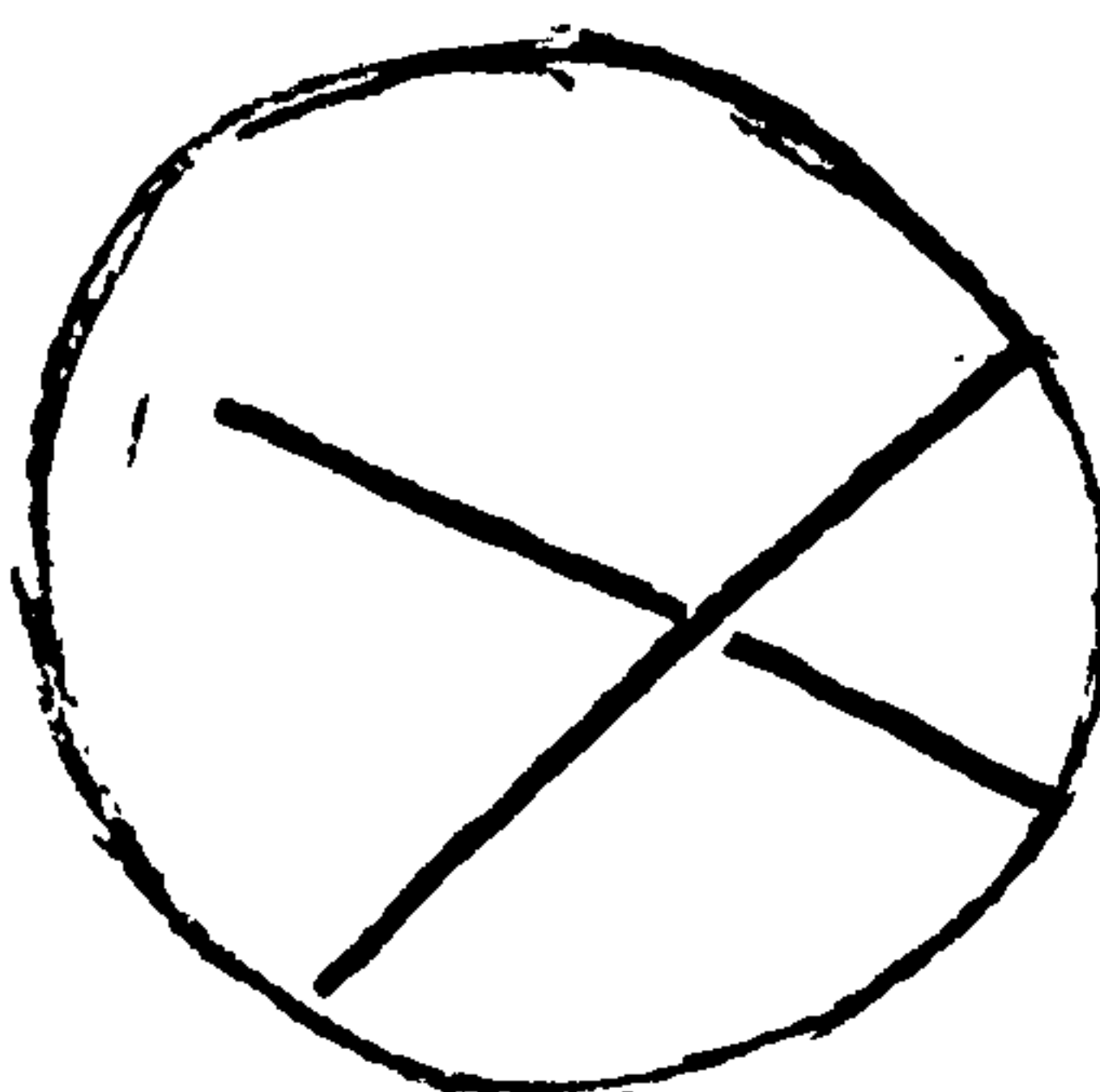
140



142

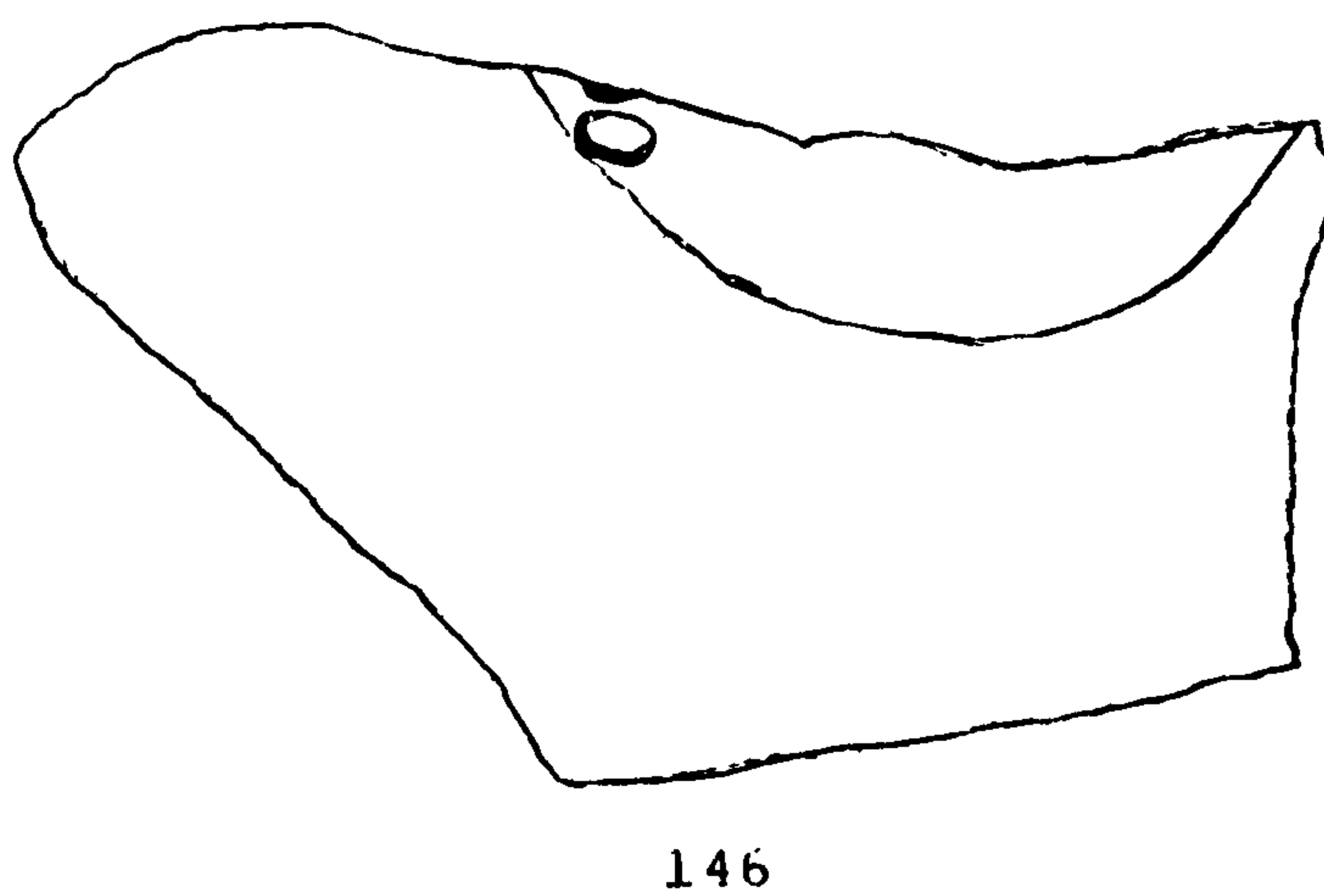
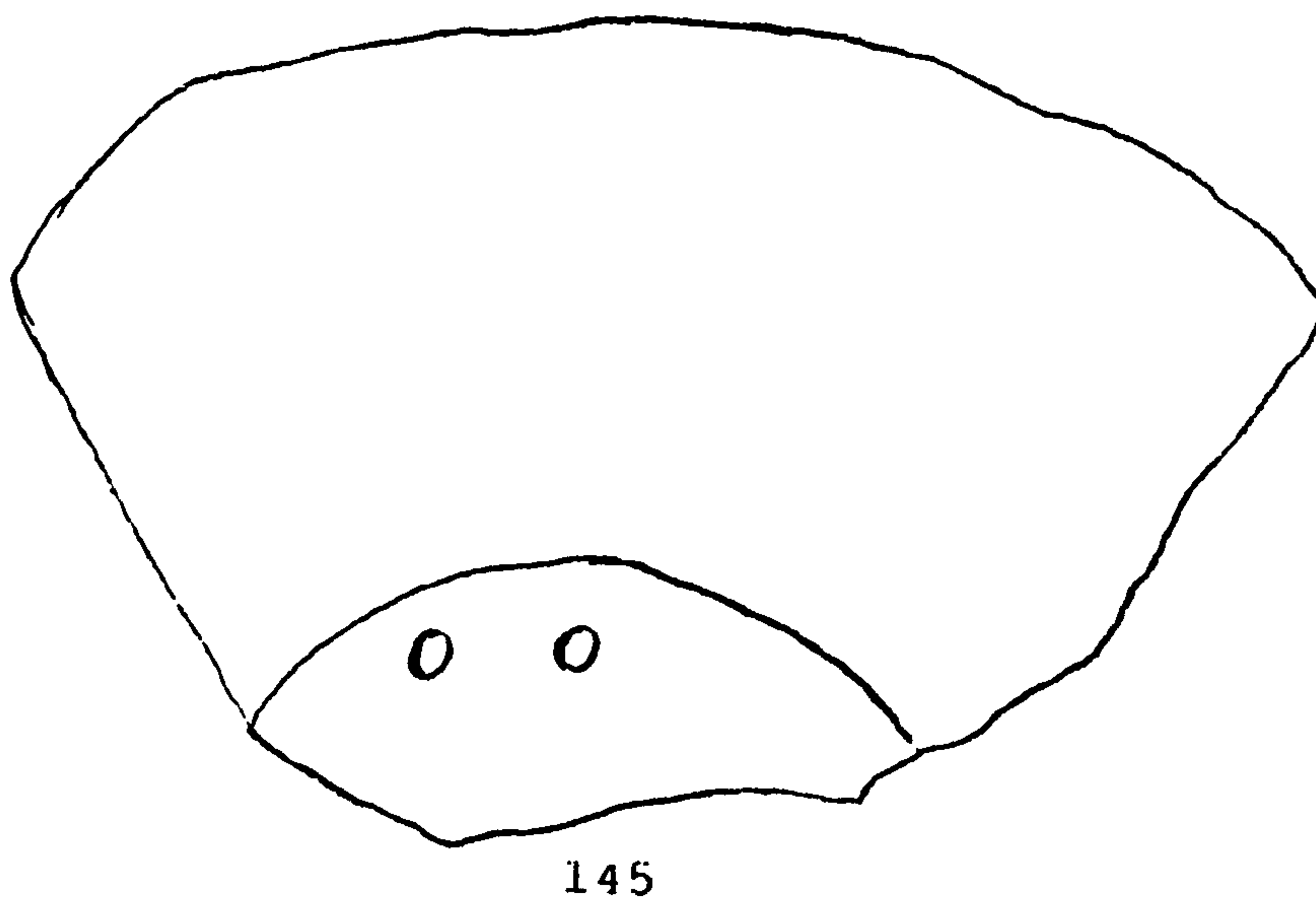
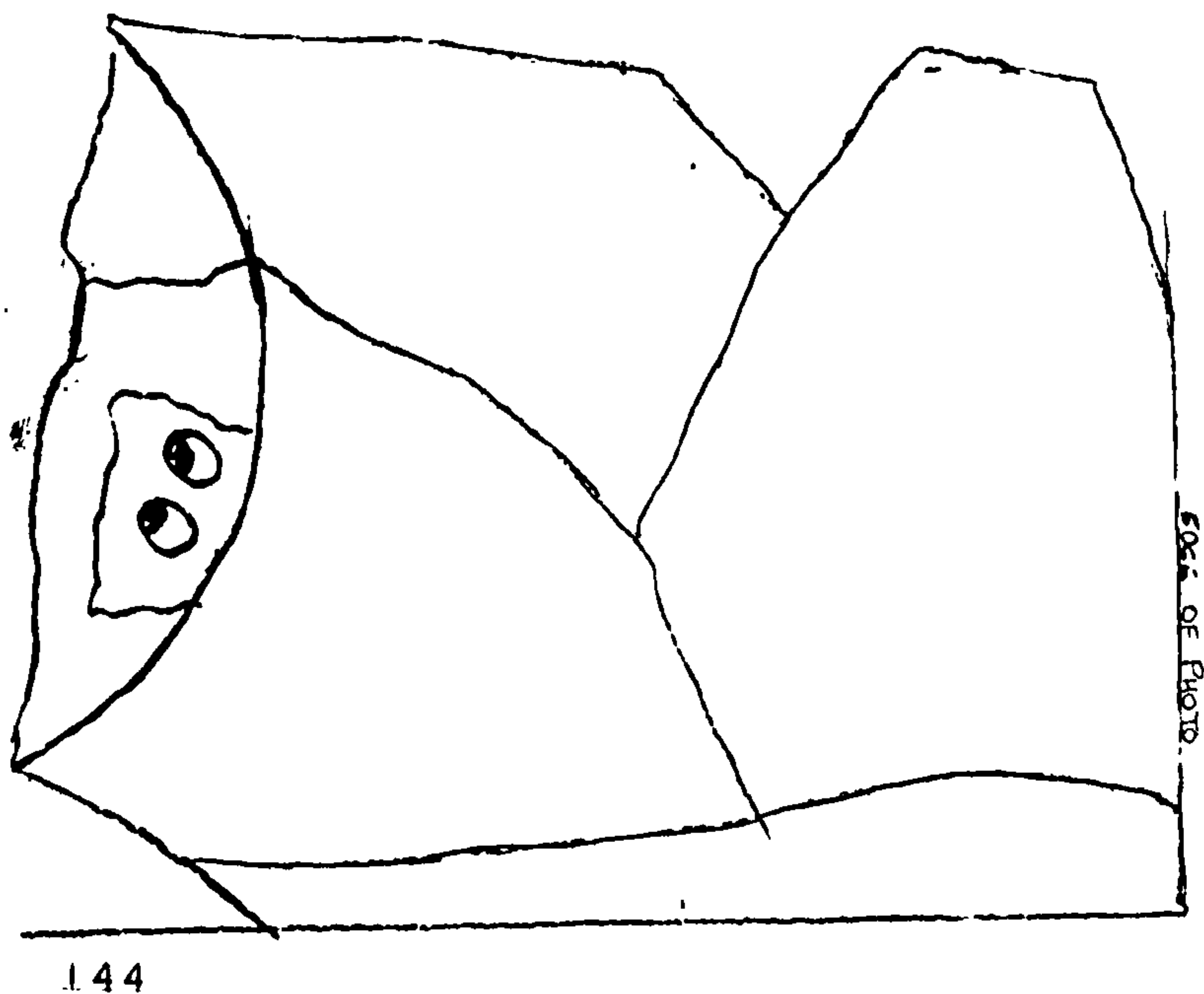


141

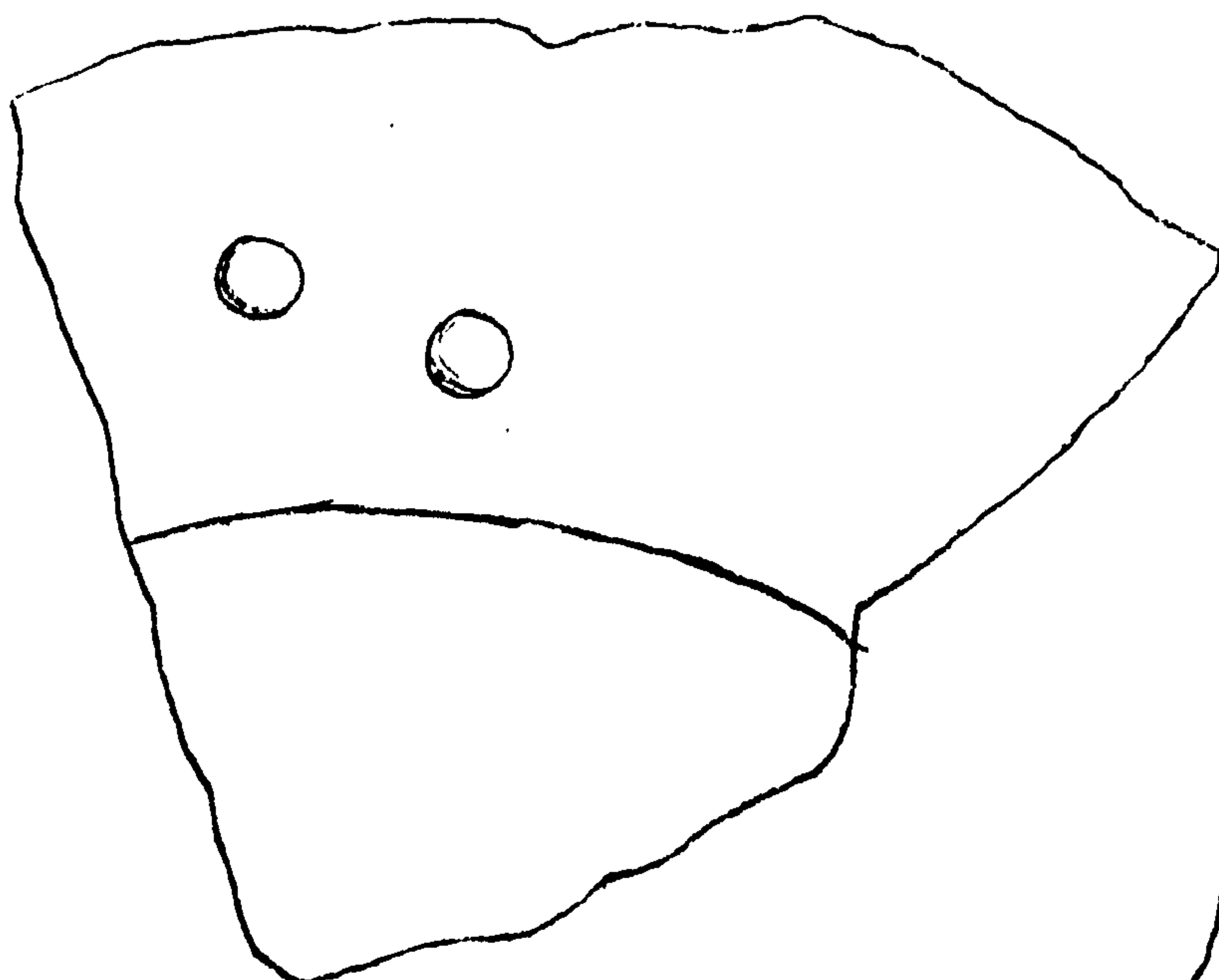


143

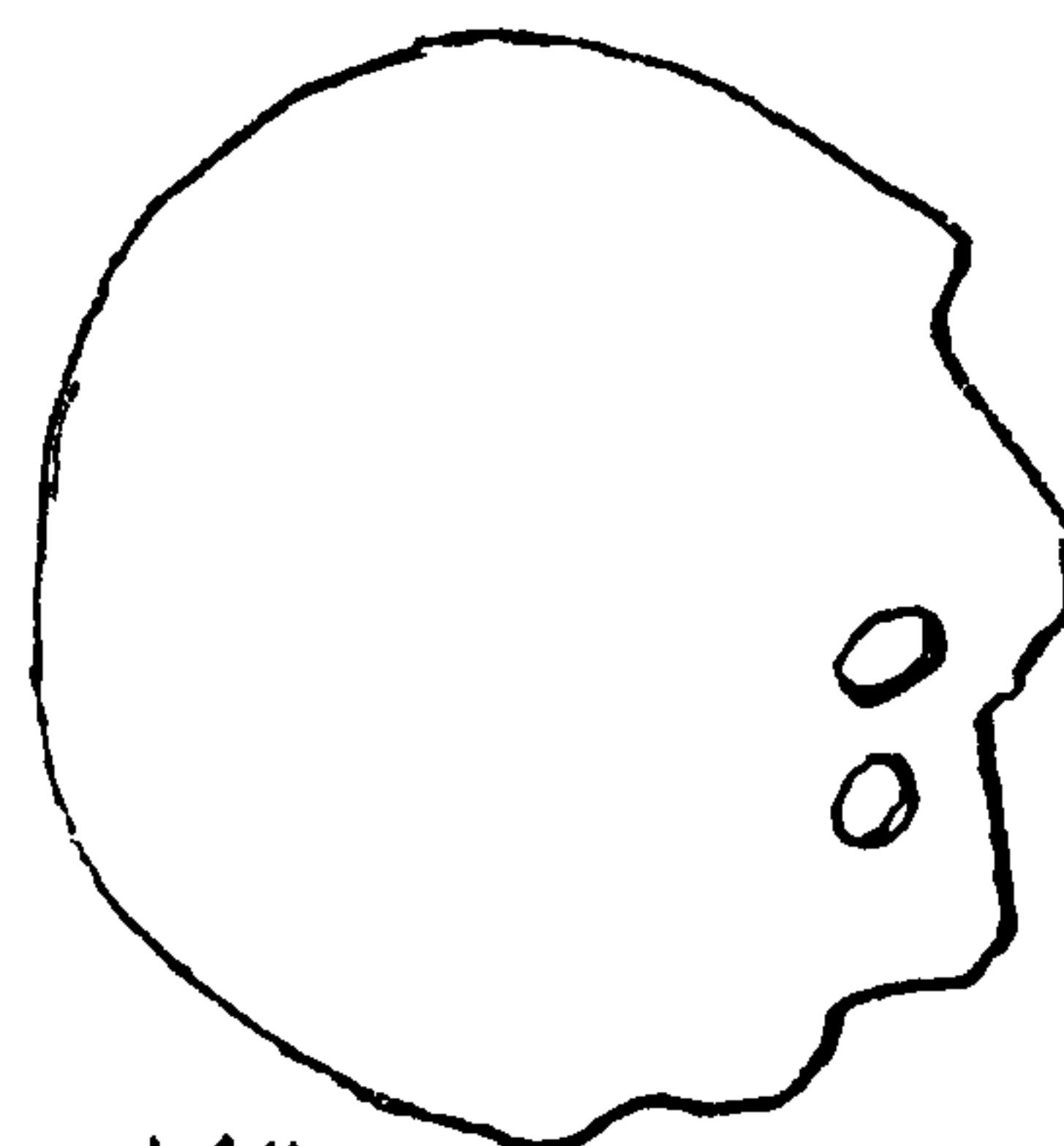
35. Phylakopi 1974-77 136-143. Scale 1:1



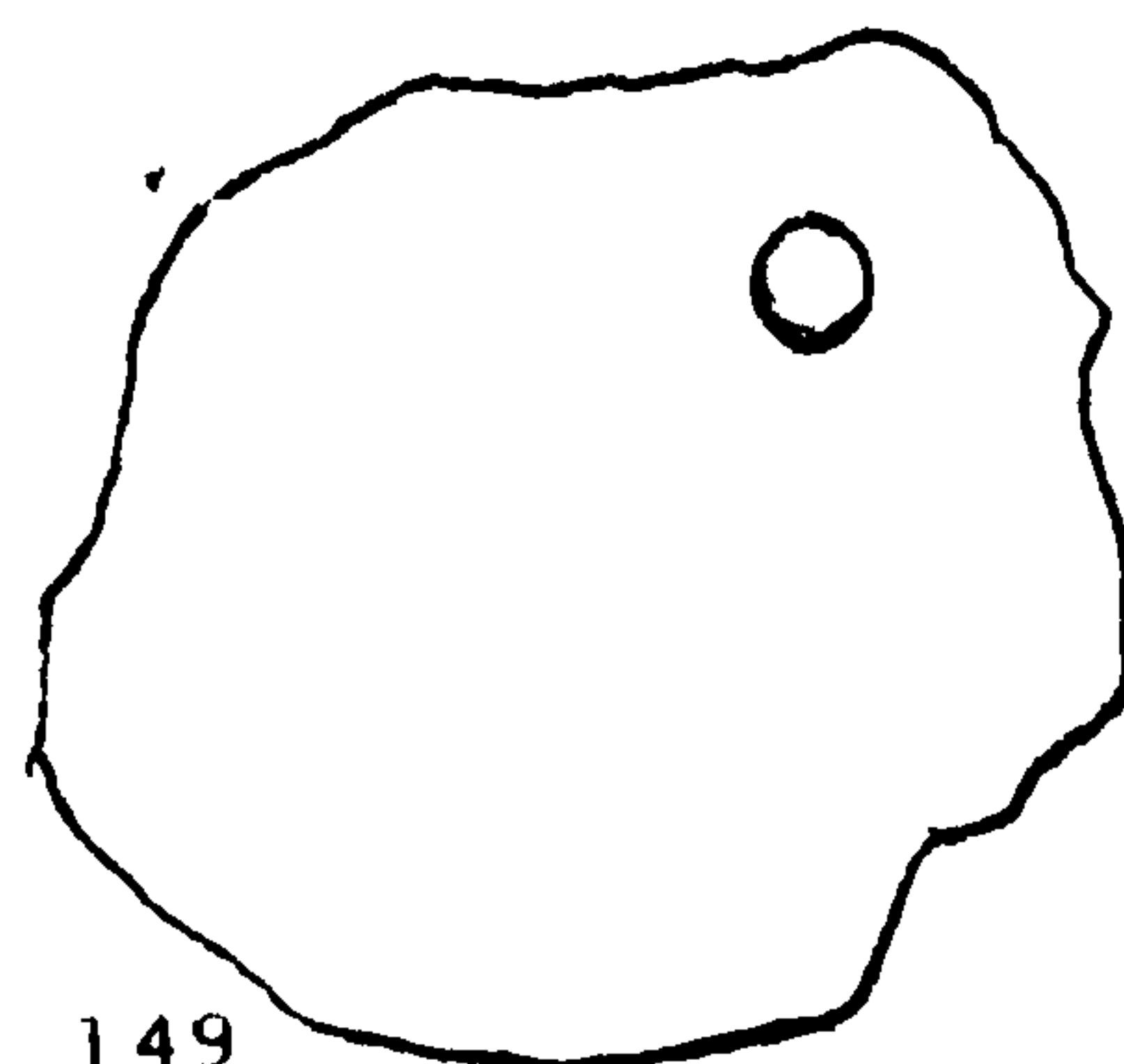
36. Phylakopi 1974-77 144-146. Scale 1:1



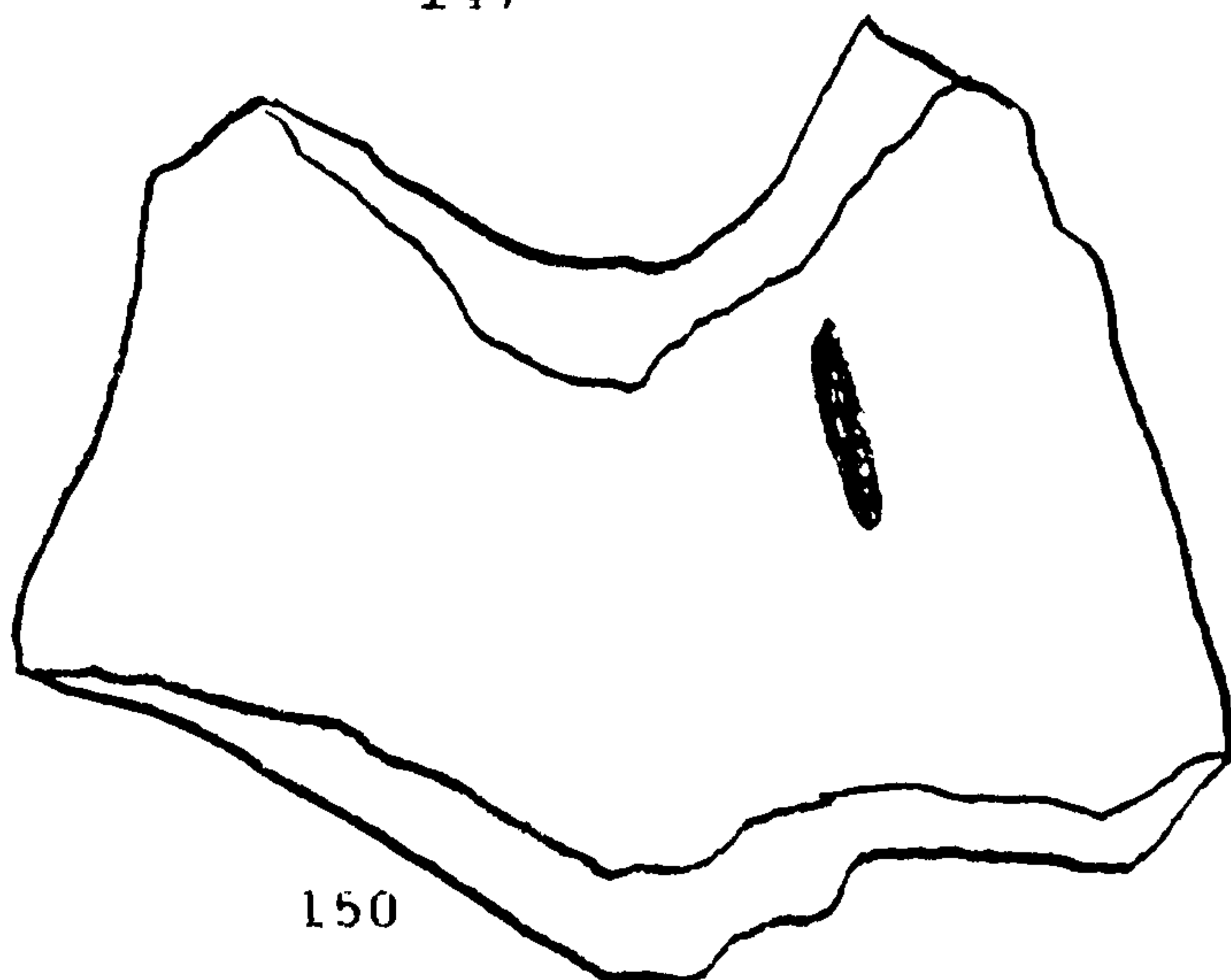
147



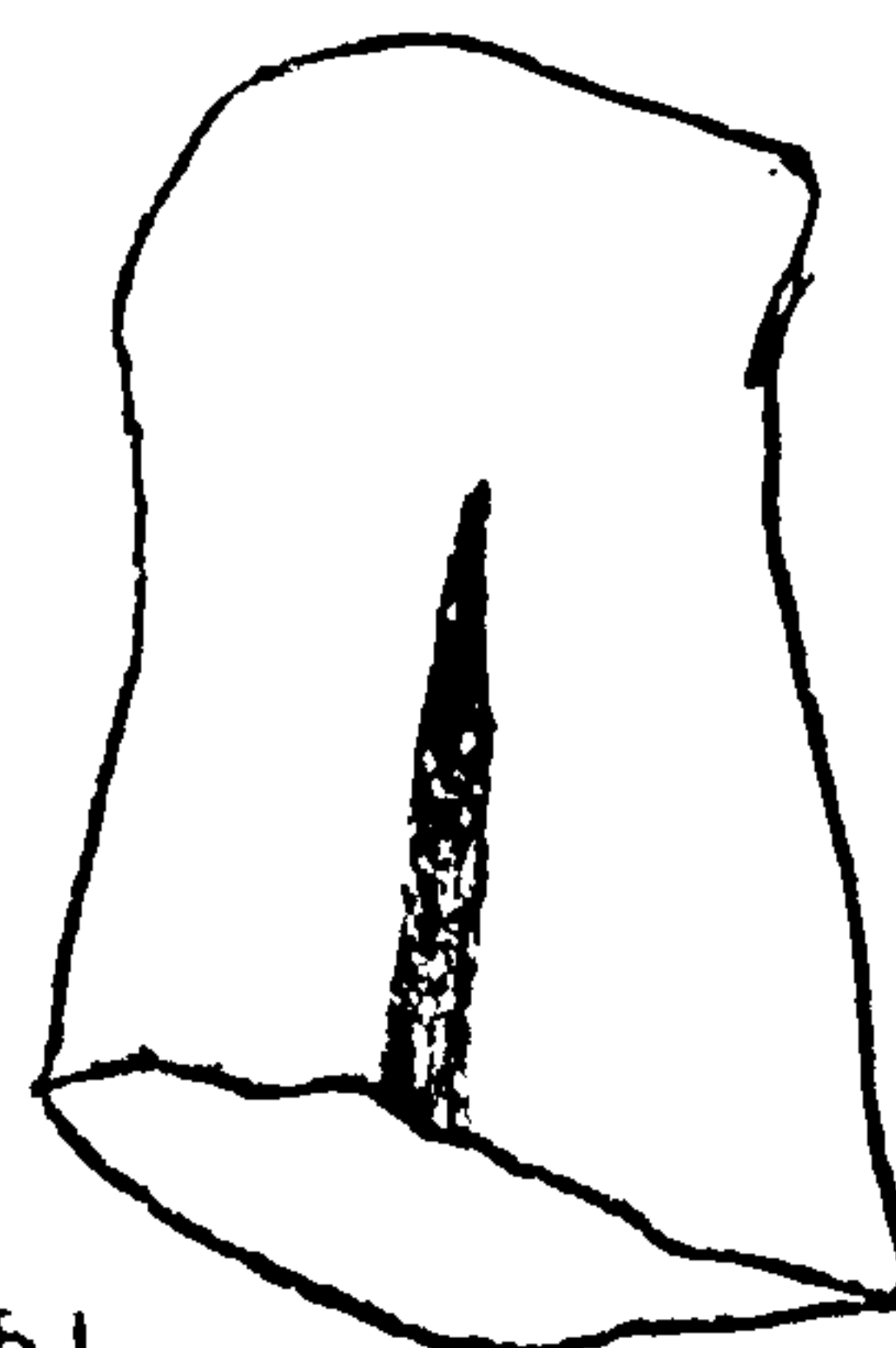
148



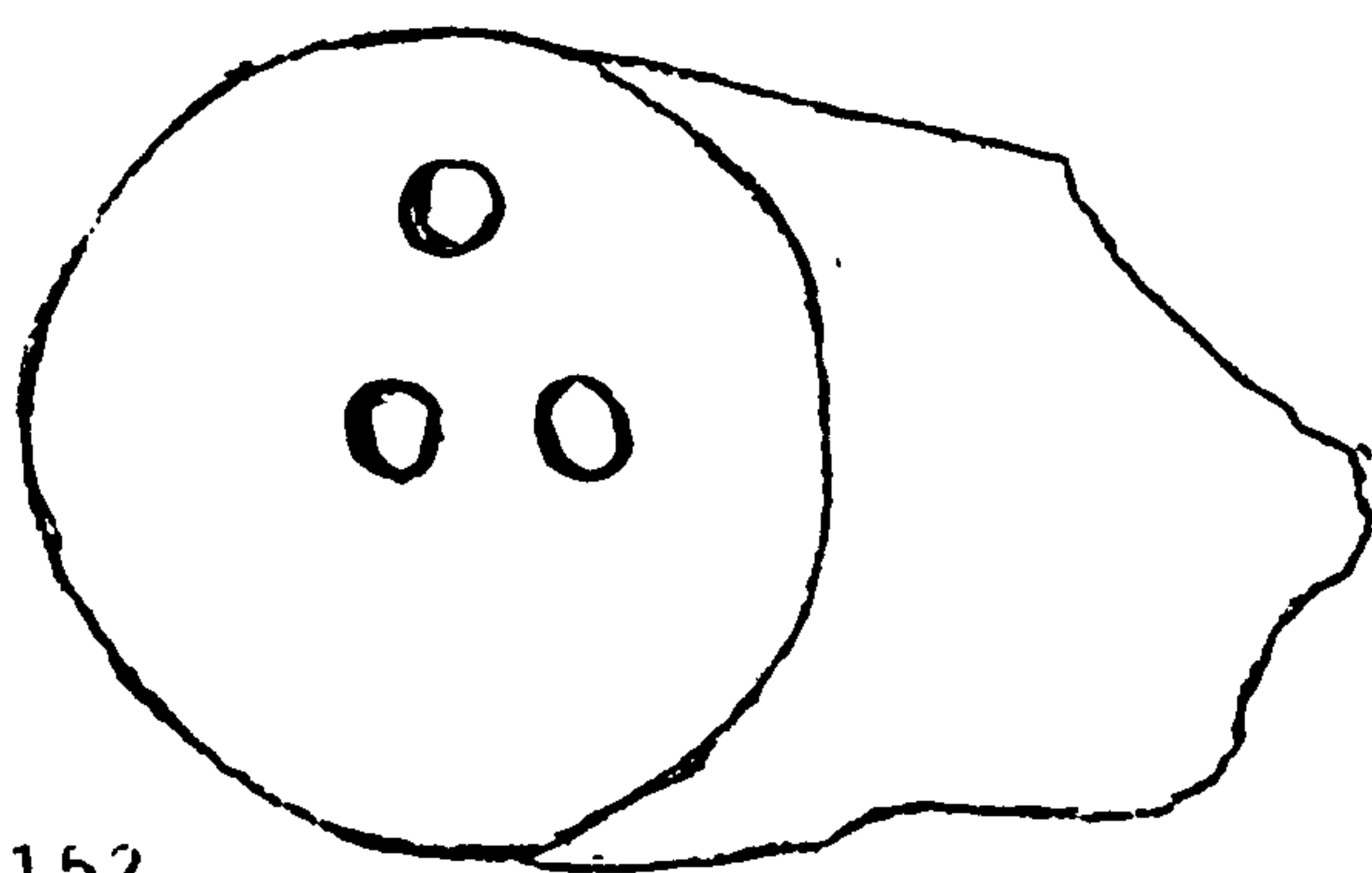
149



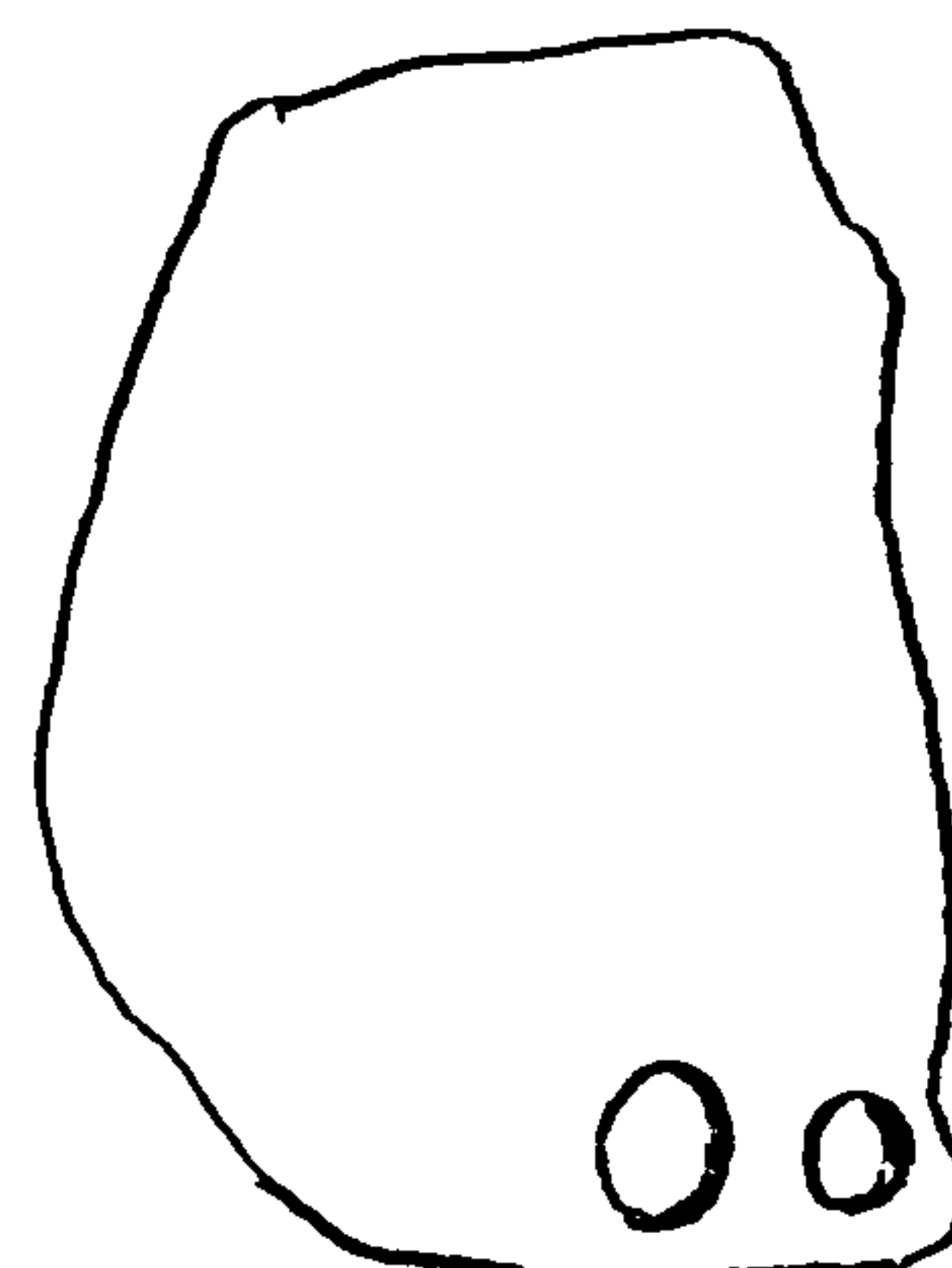
150



151

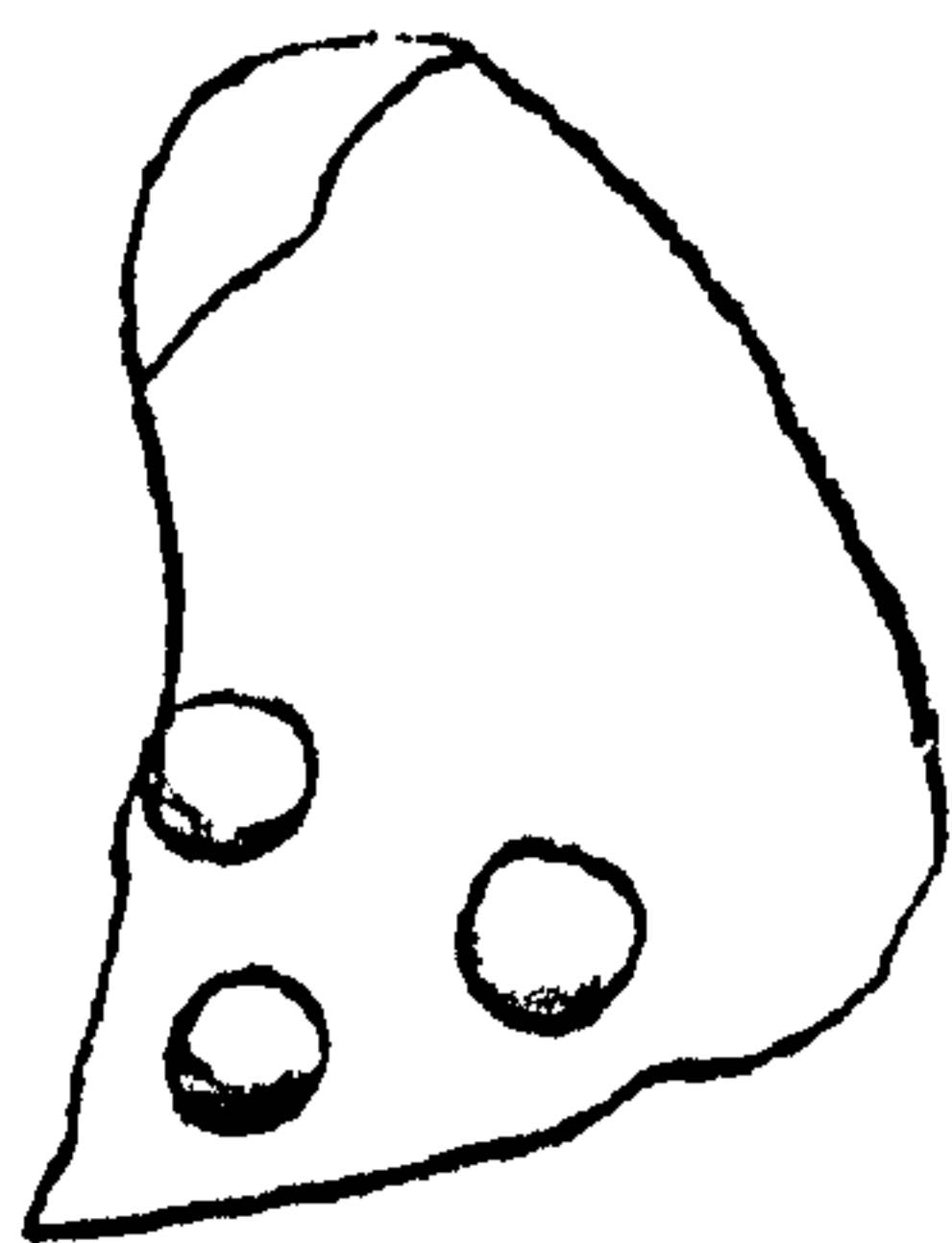


152

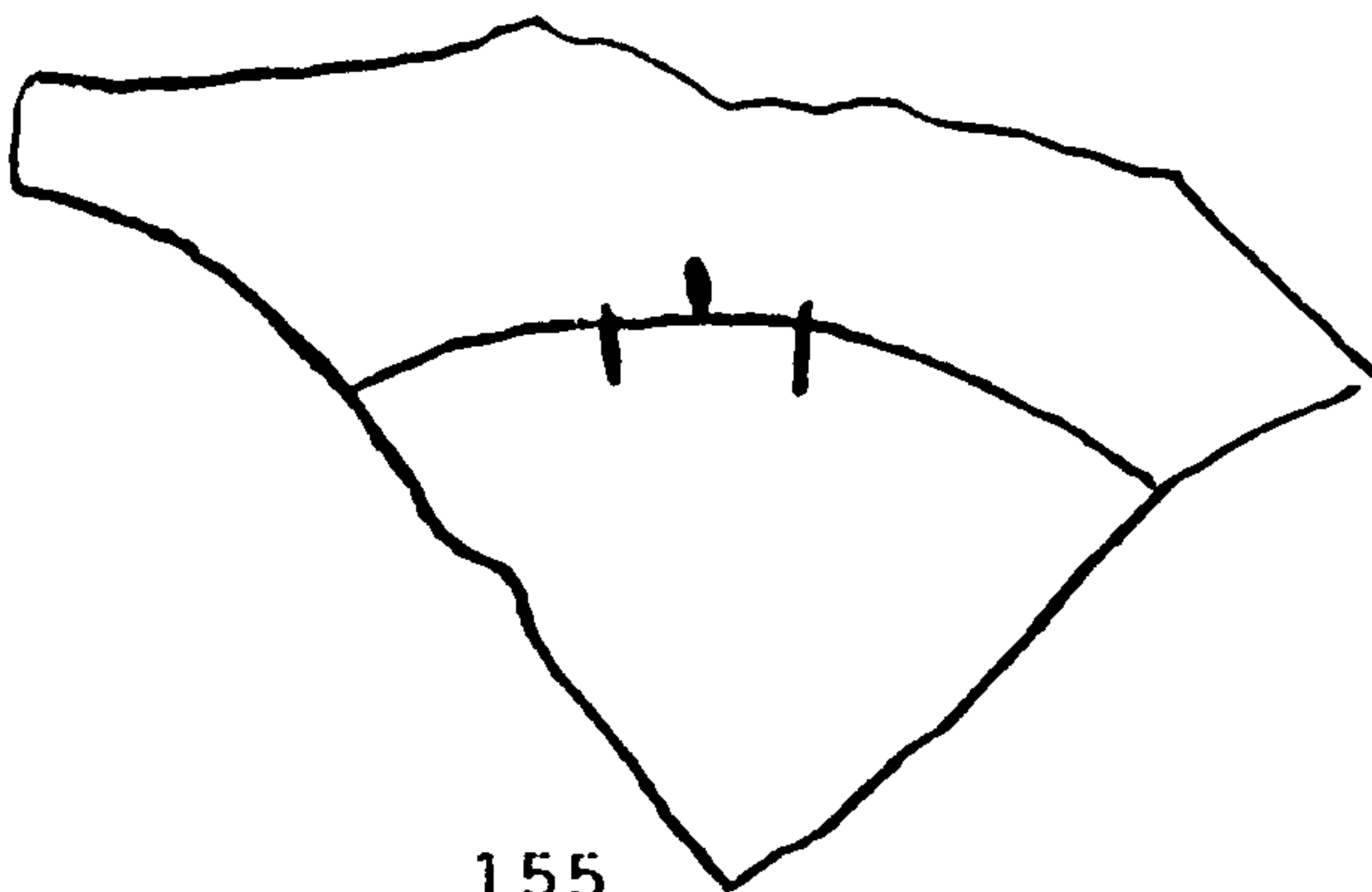


153

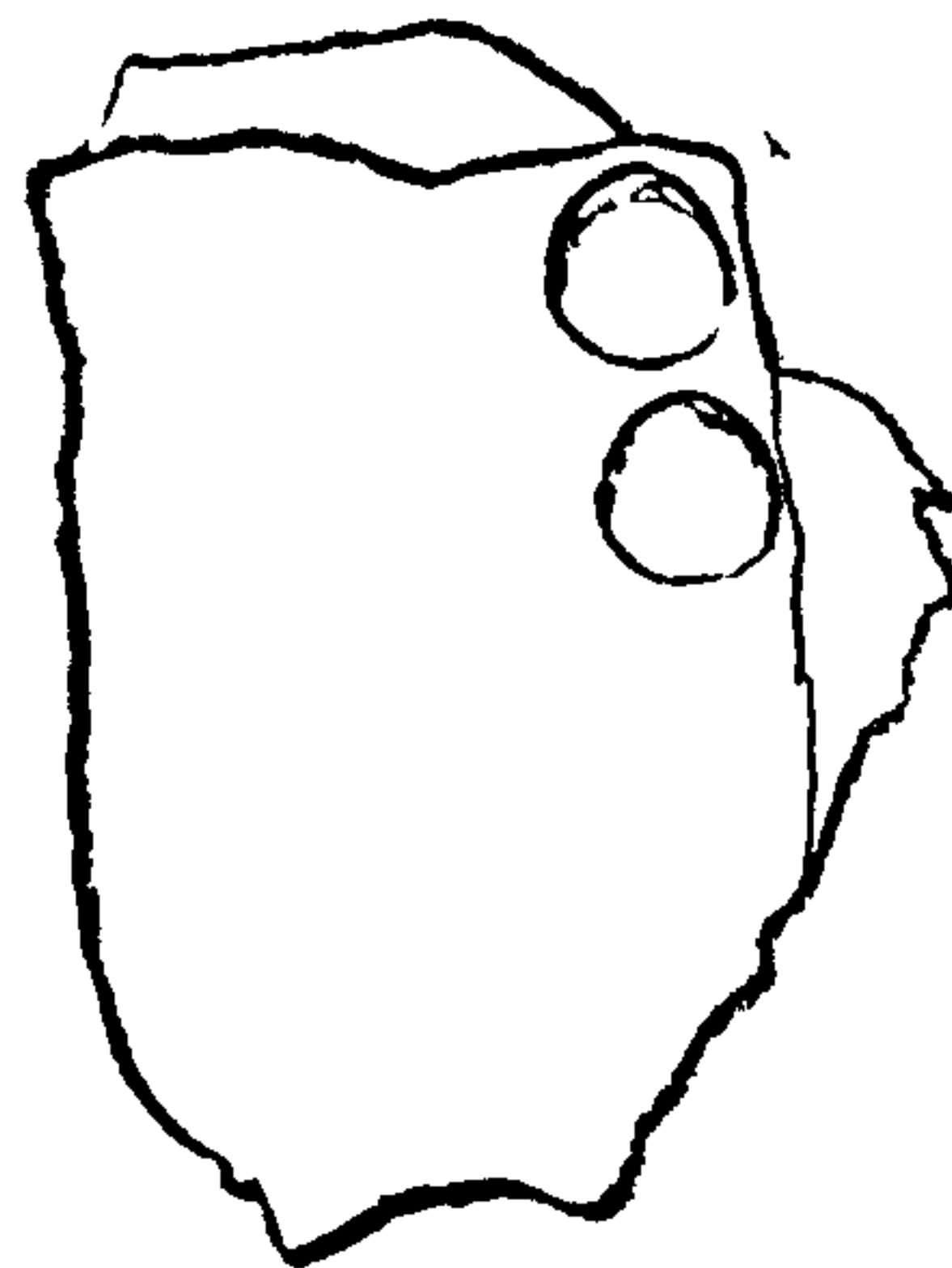
37. Phylakopi 1974-77 147-153. Scale 1:1



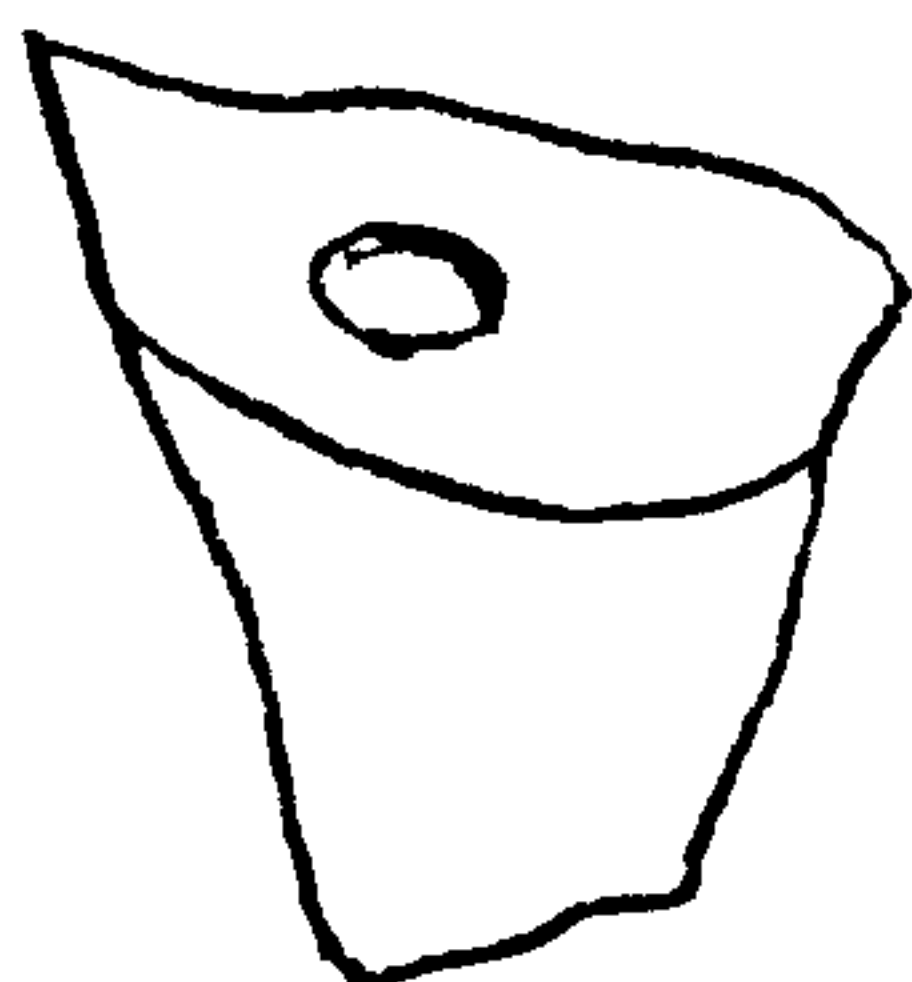
154



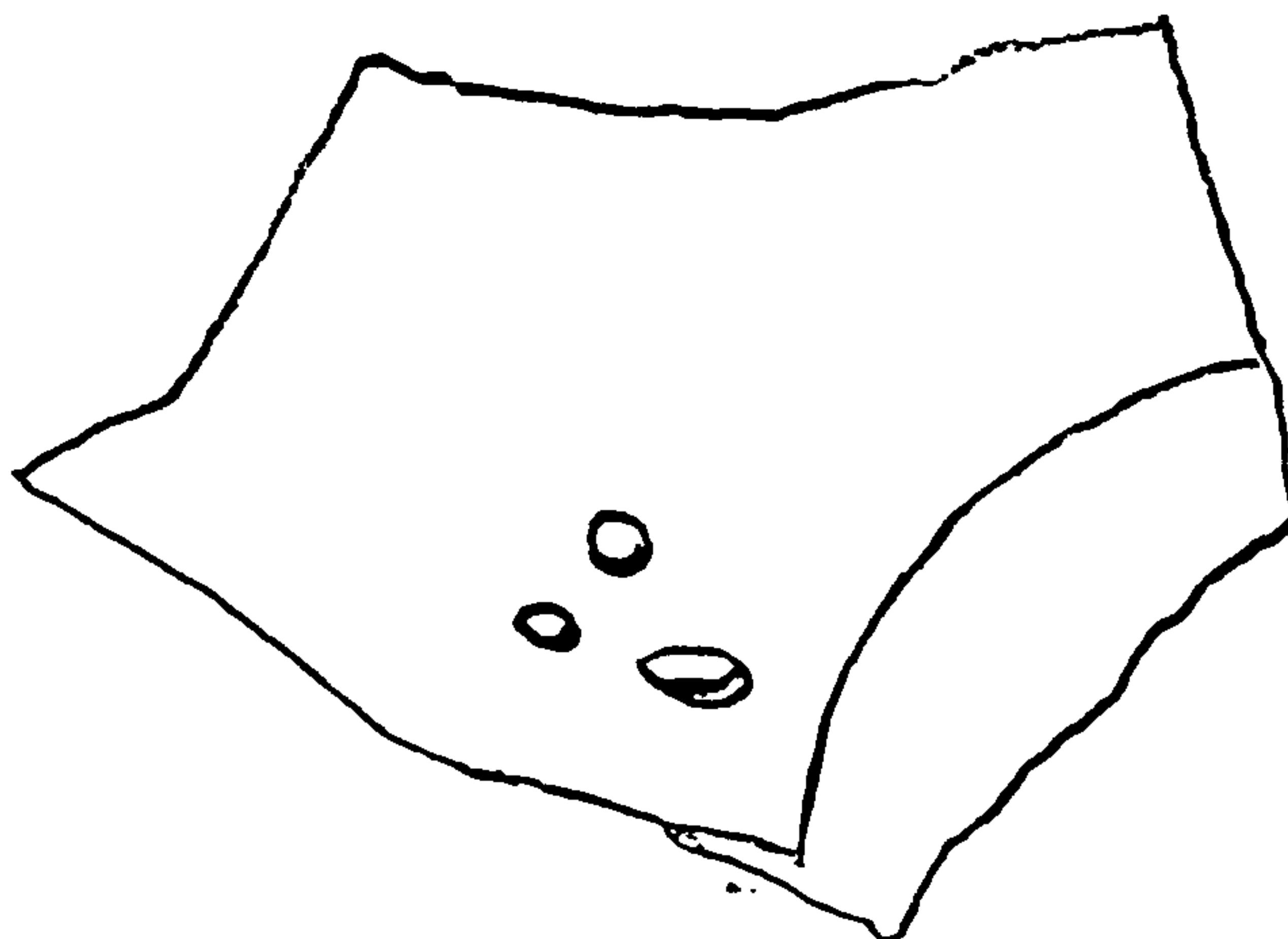
155



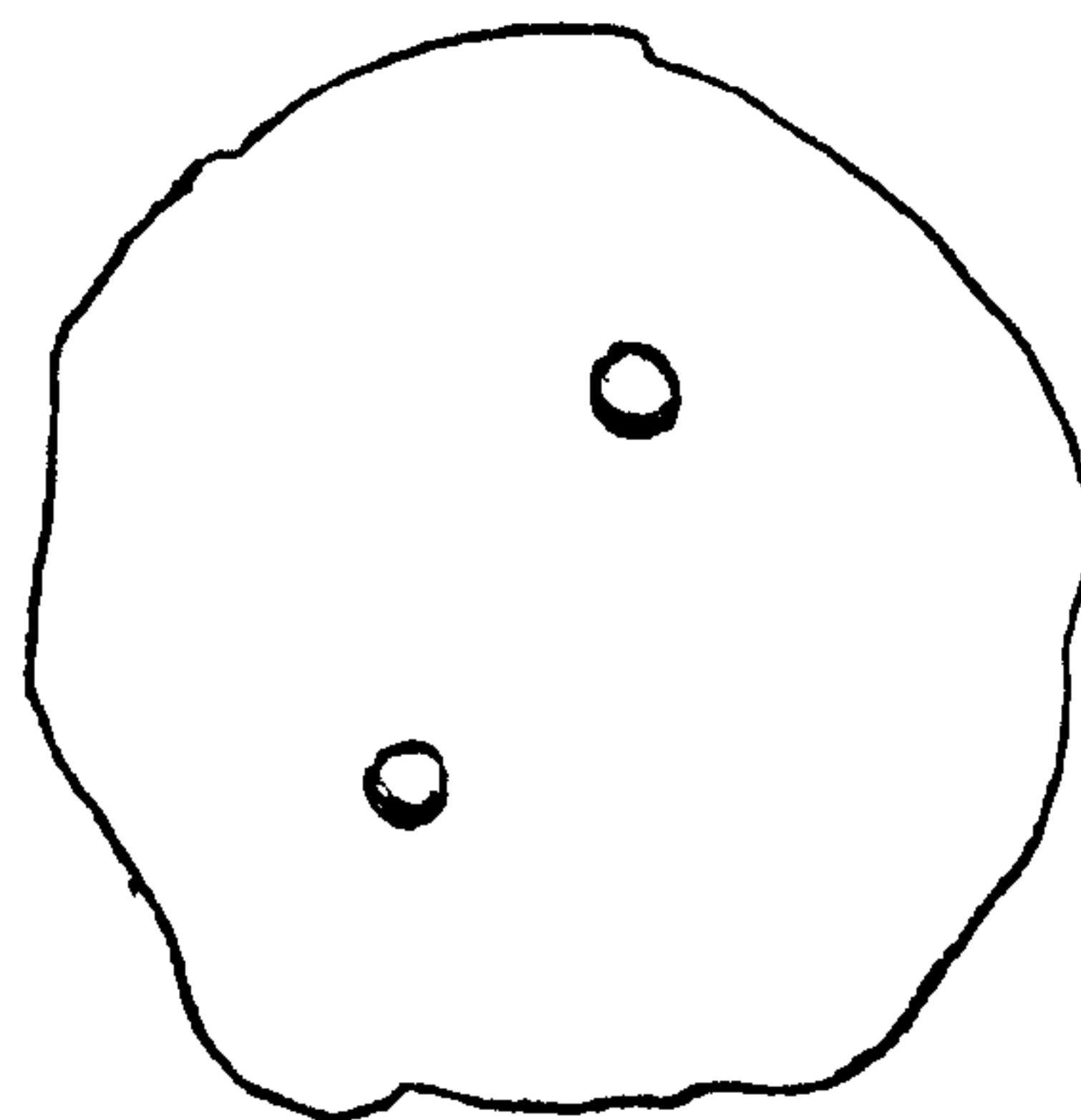
156



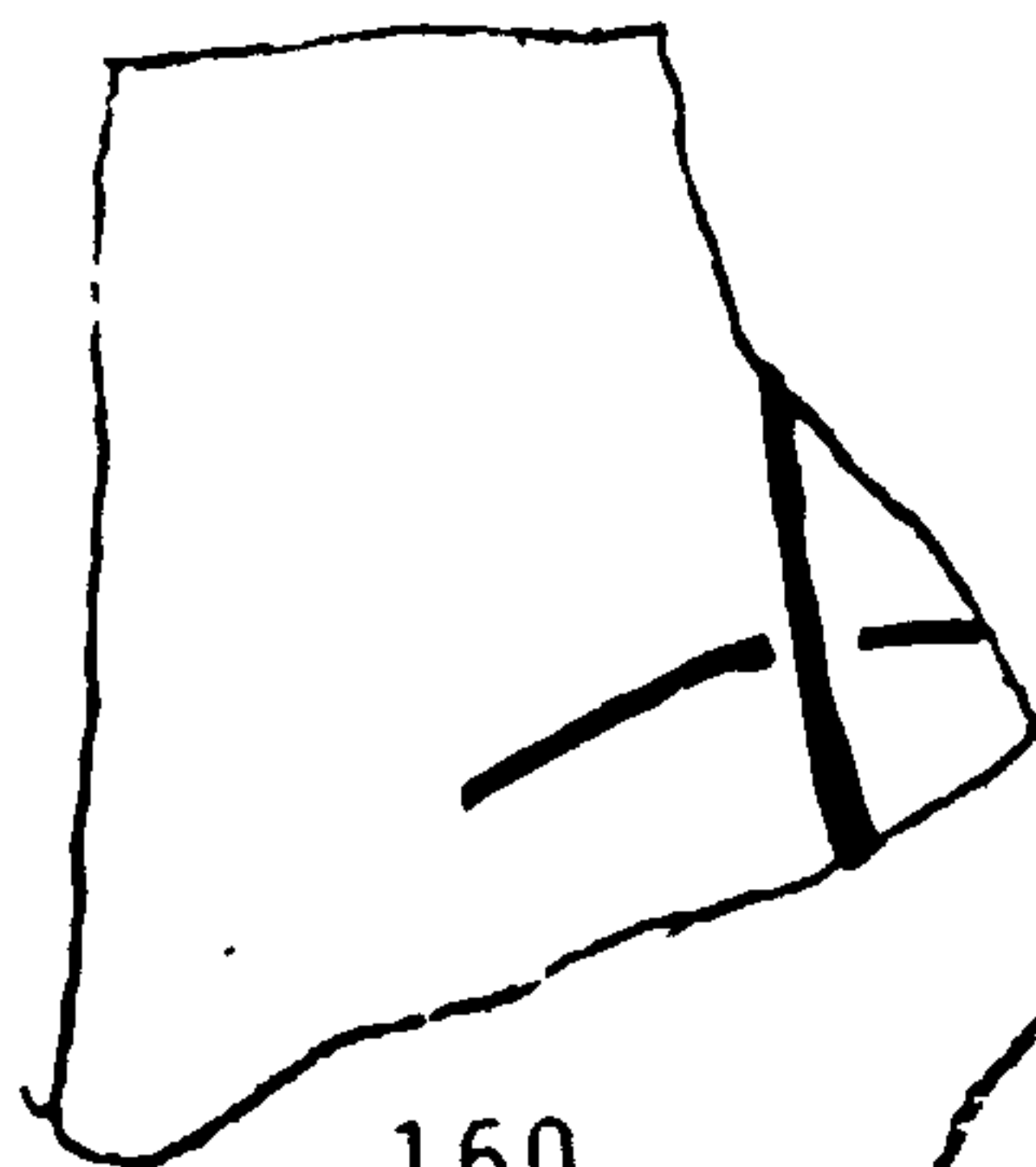
157



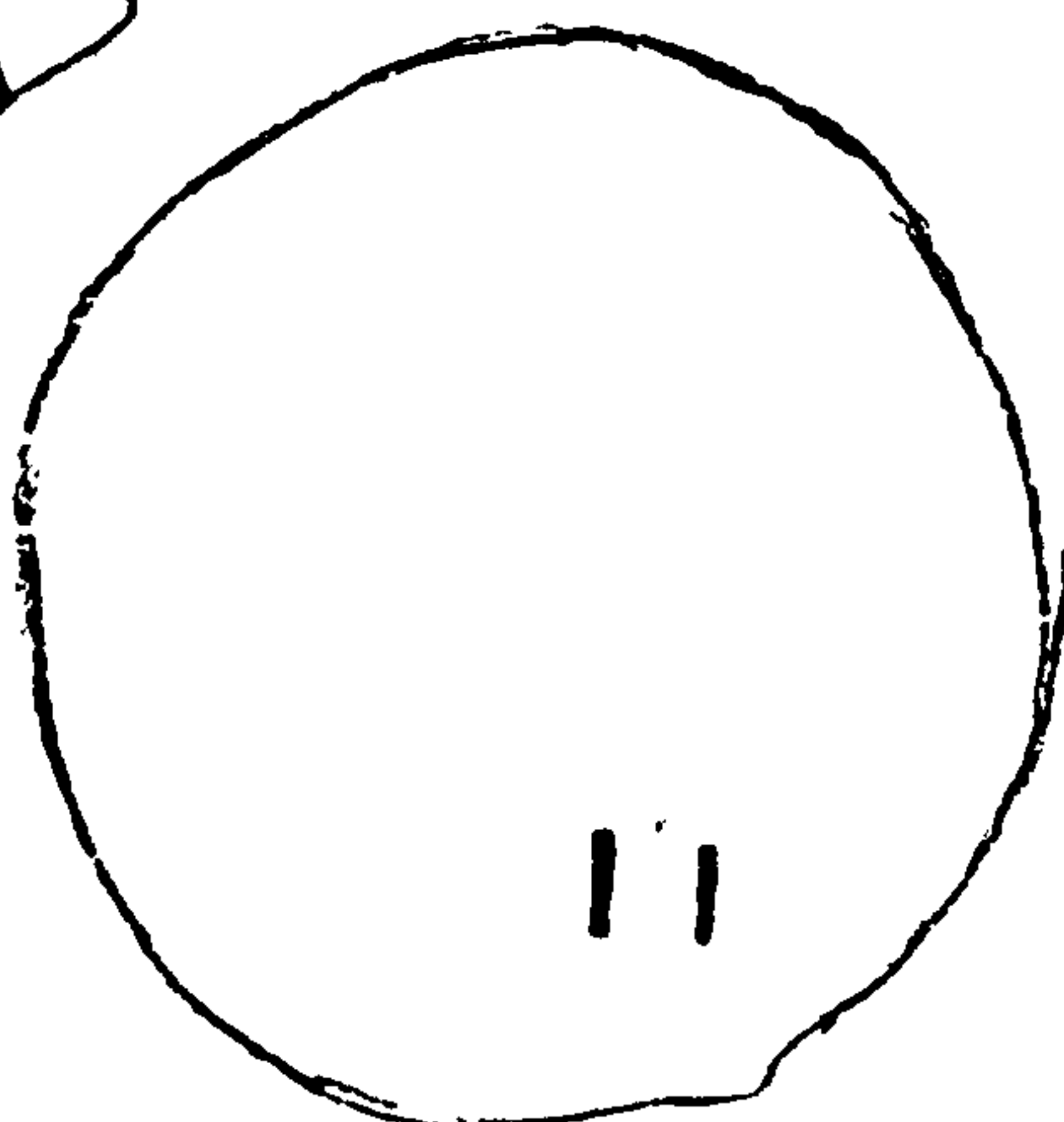
158



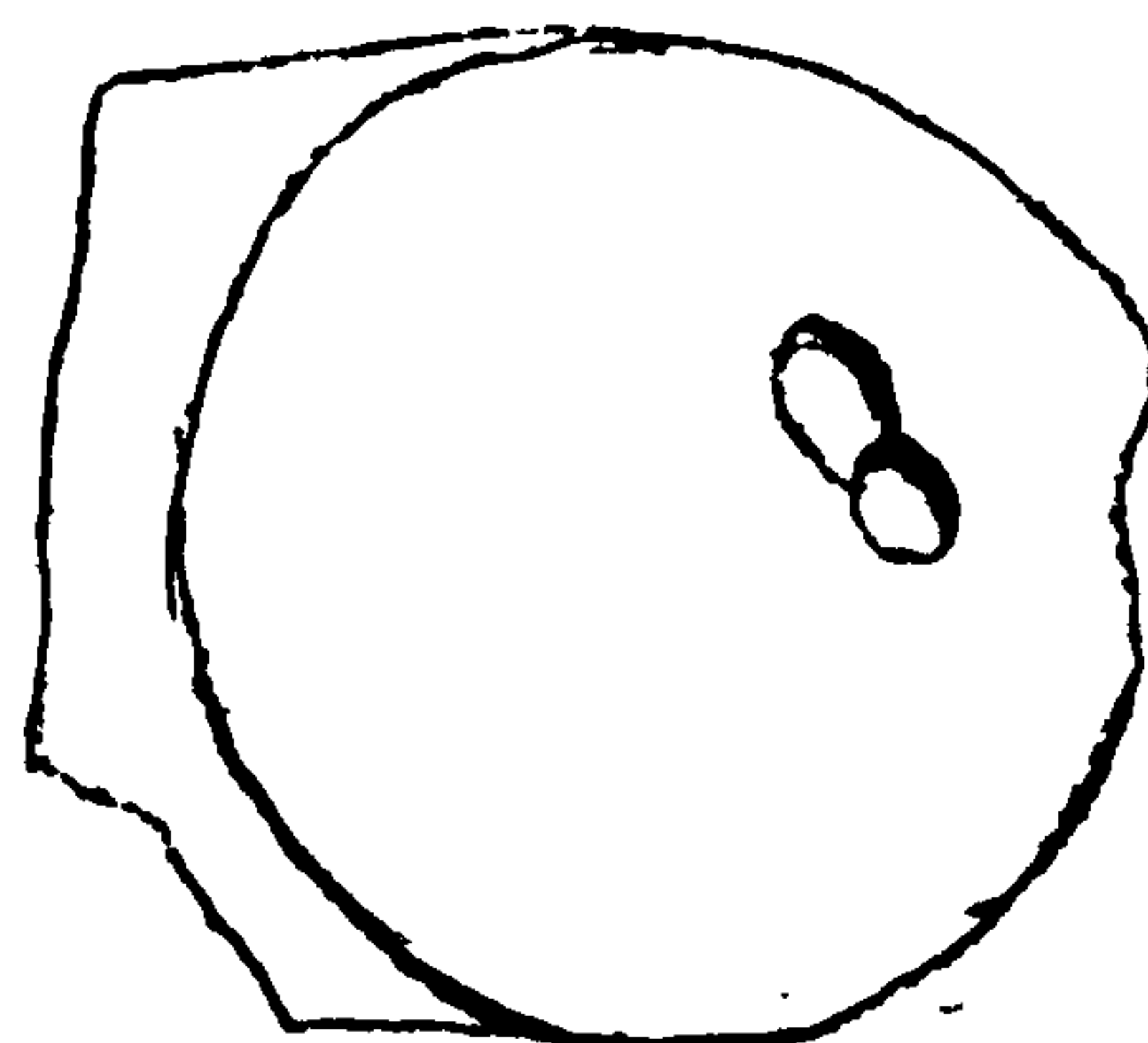
159



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161

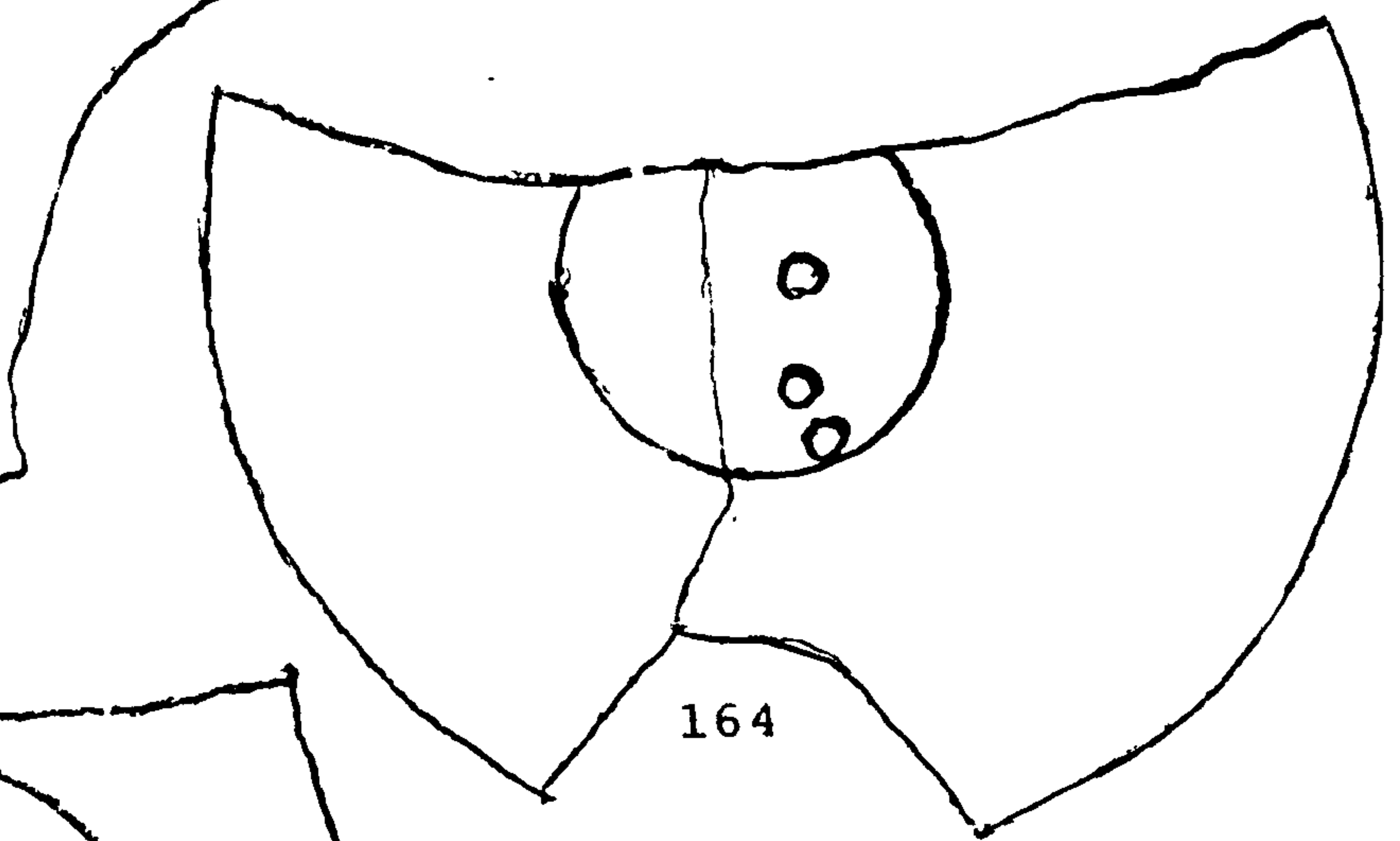


162

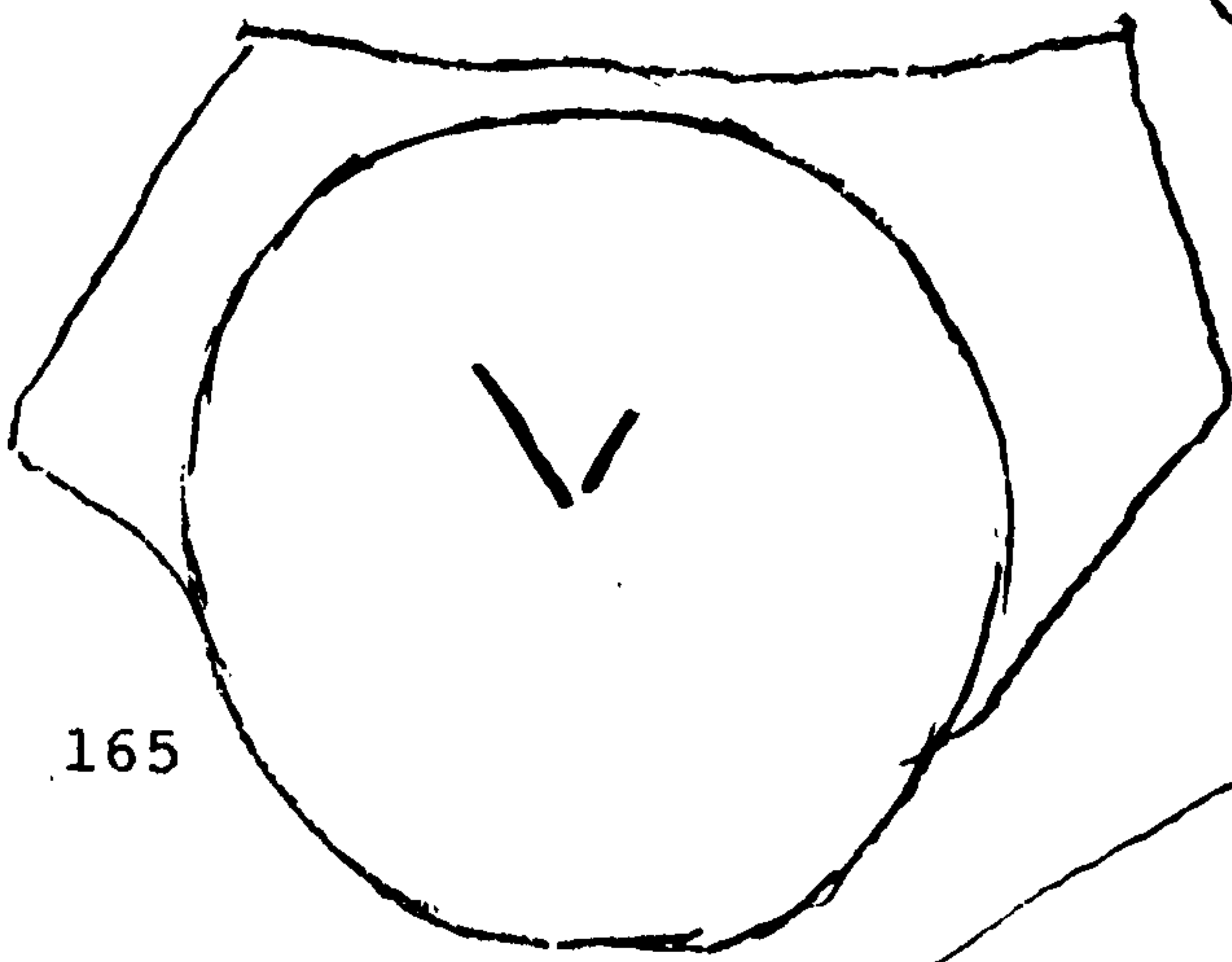
38. Phylakopi 1974-77 154-162. Scale 1:1



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164

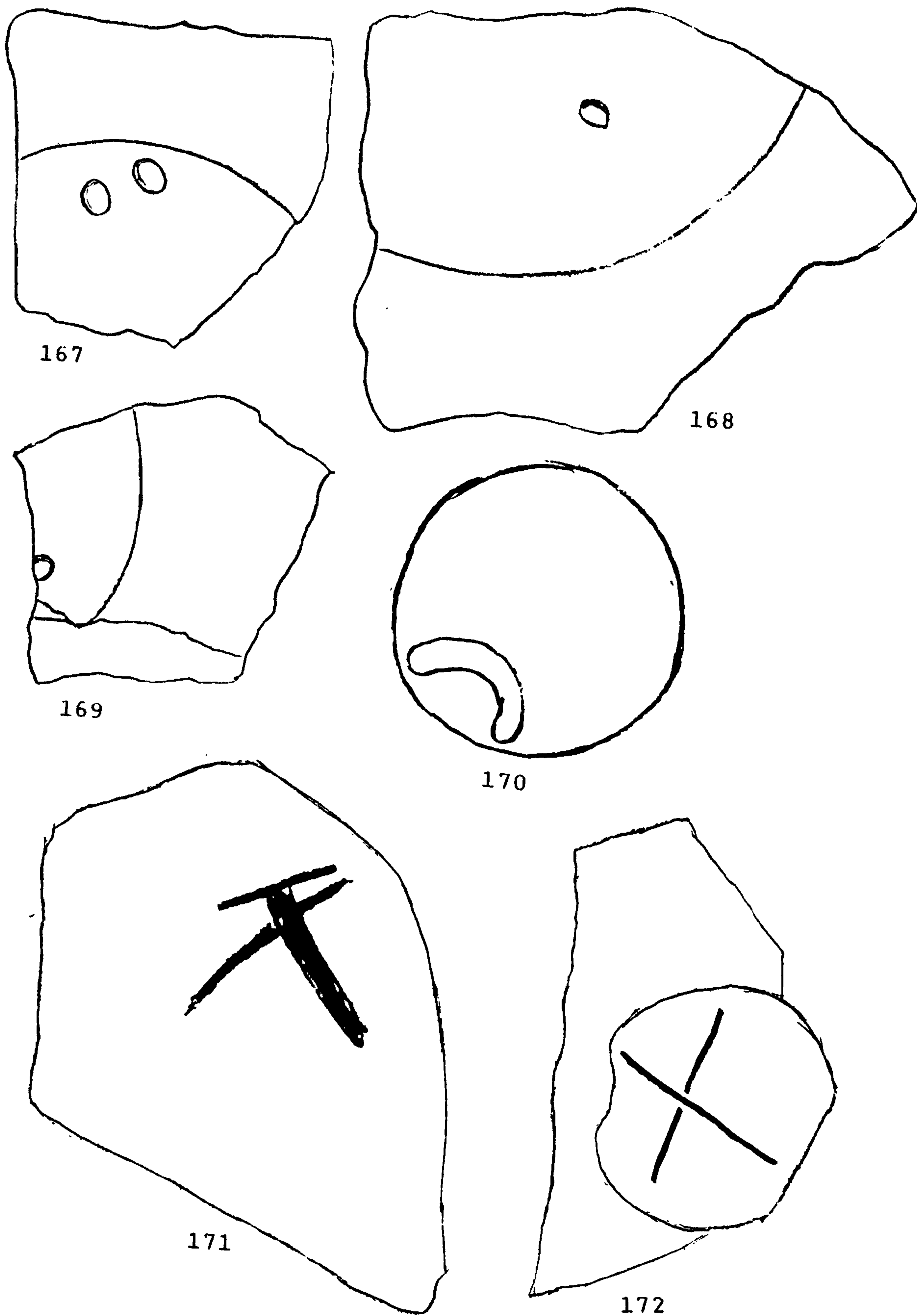


165

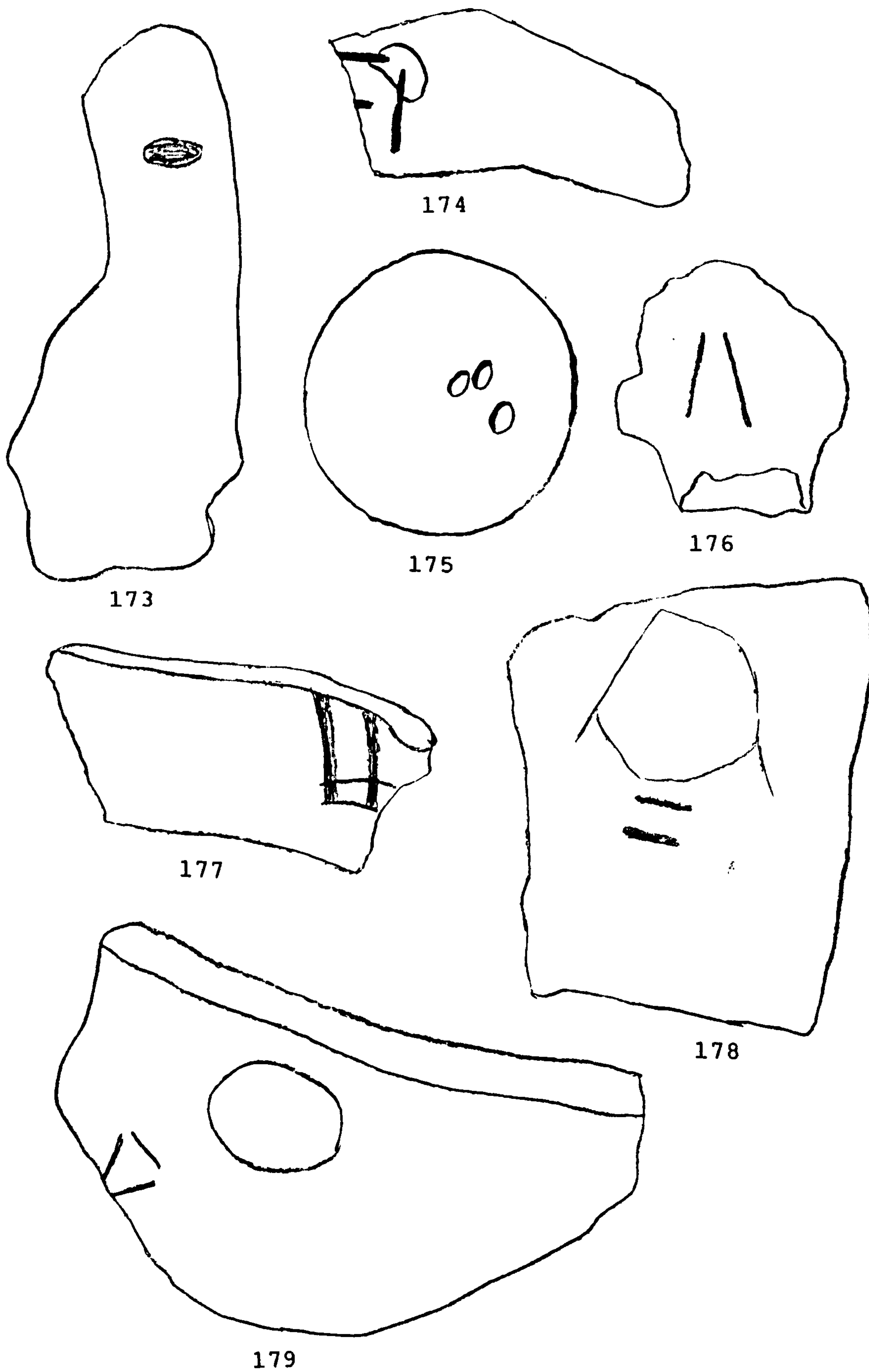


166

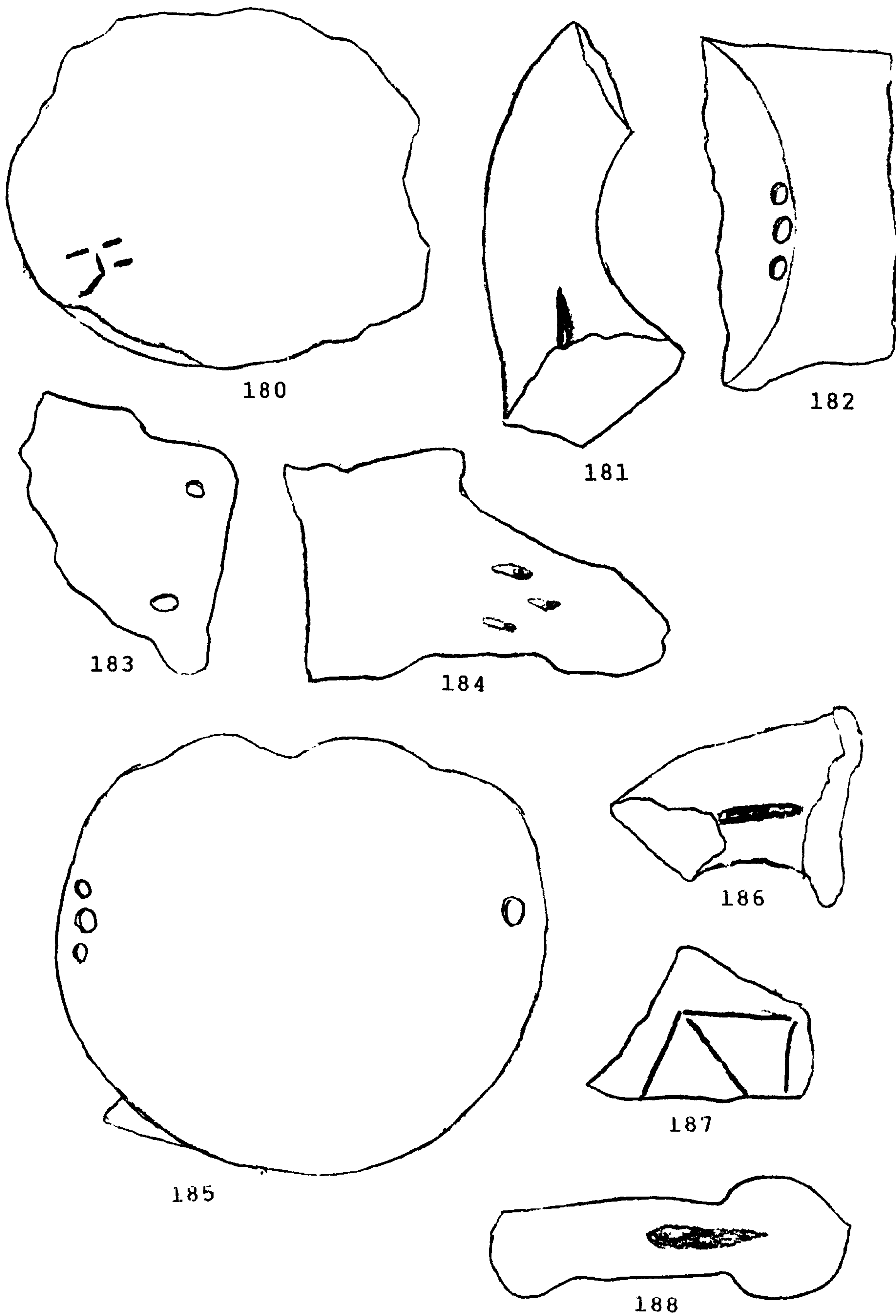
39. Phylakopi 1974-77 163-166. Scale 1:1



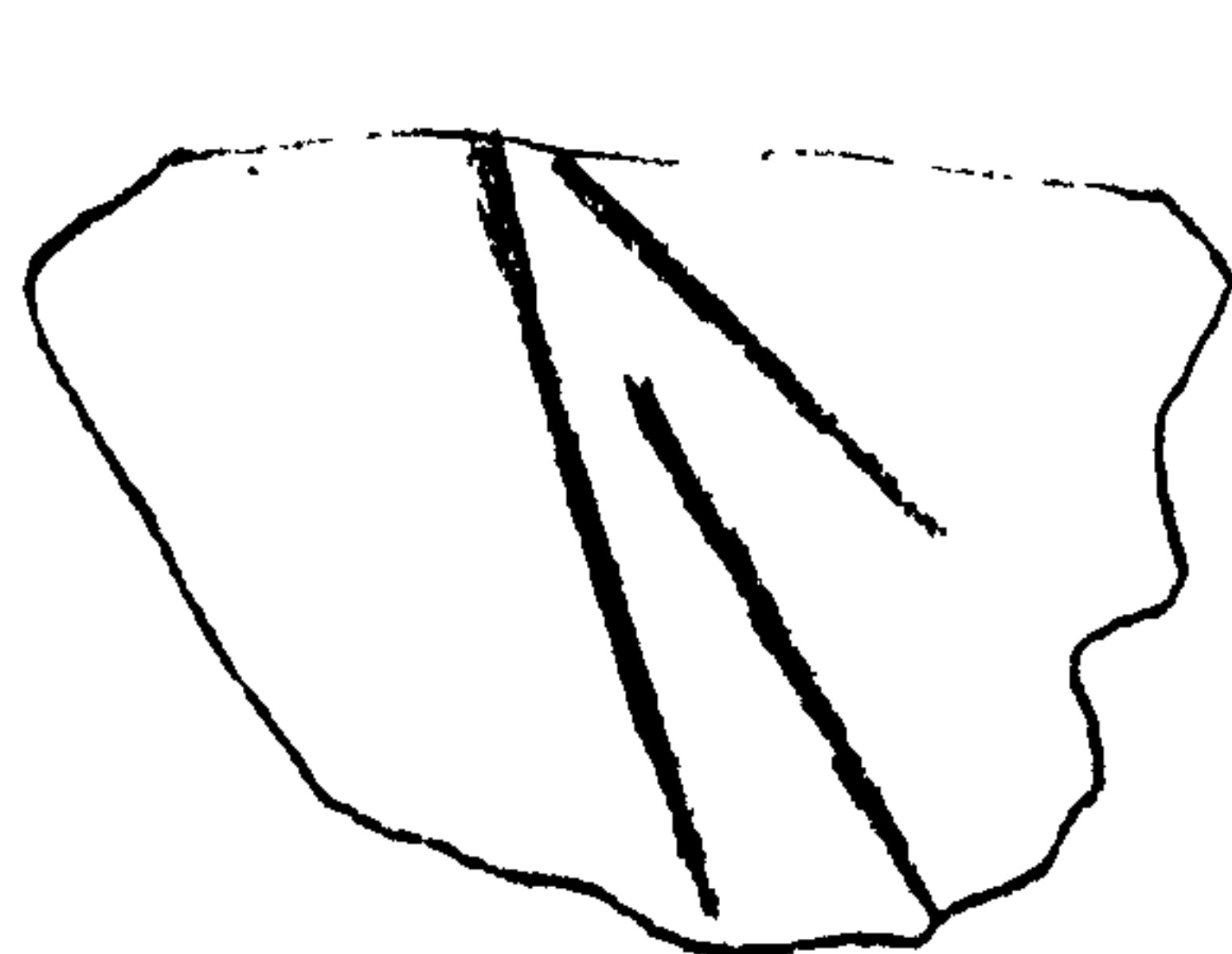
40. Phylakopi 1974-77 167-172. Scale 1:1



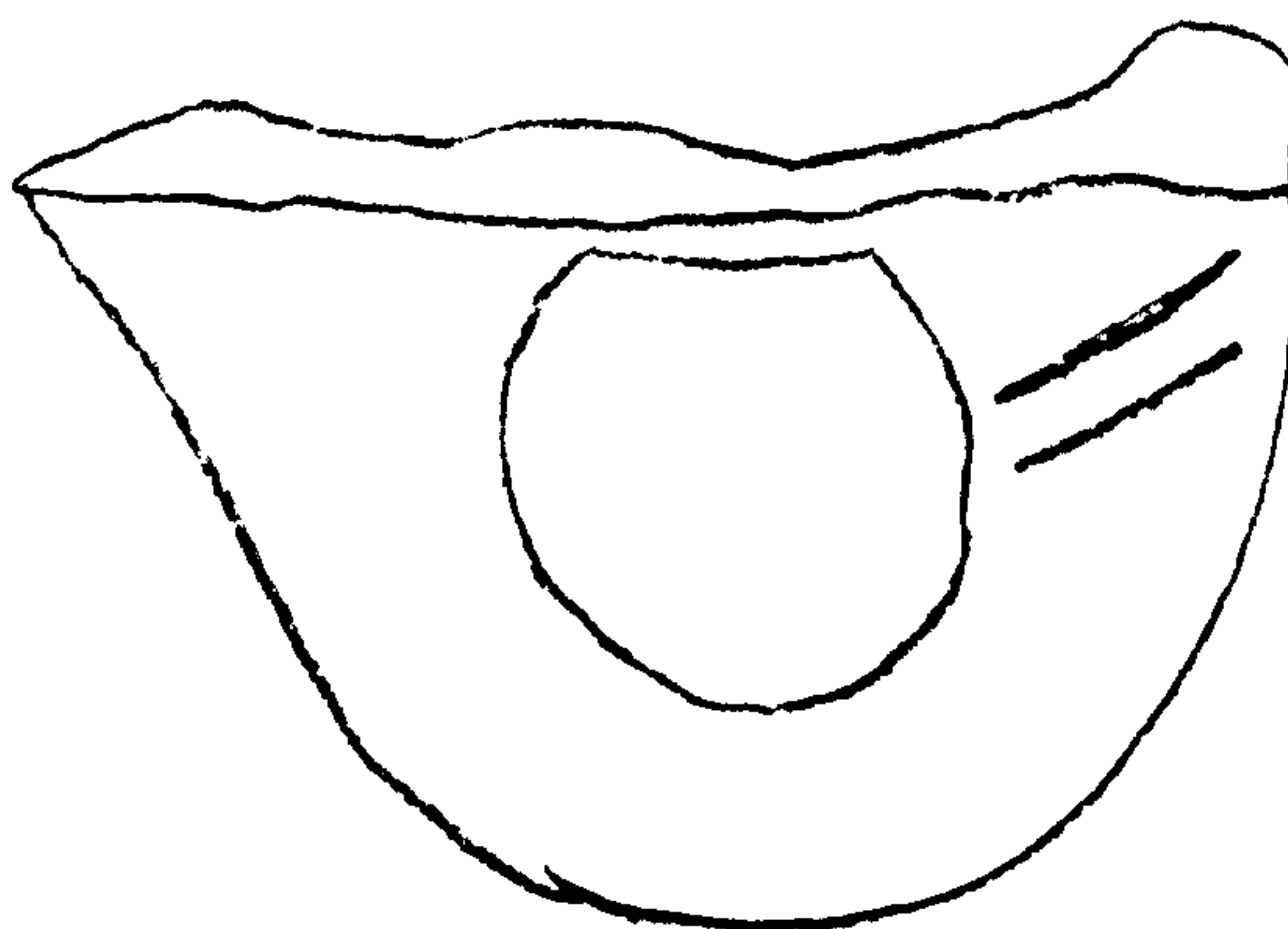
41. Phylakopi 1974-77 173-179. Scale 1:1



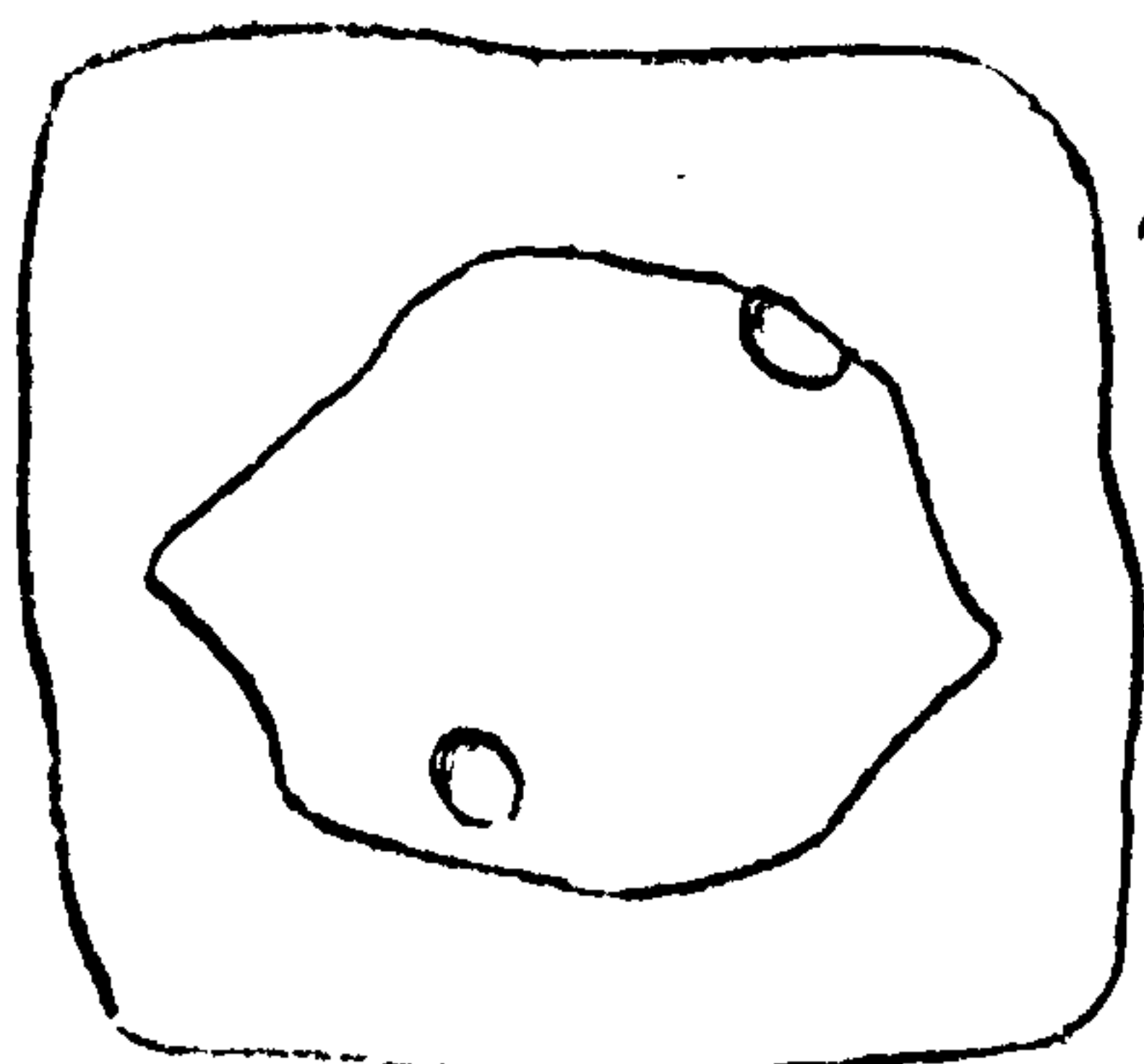
42. Phylakopi 1974-77 180-188. Scale 1:1



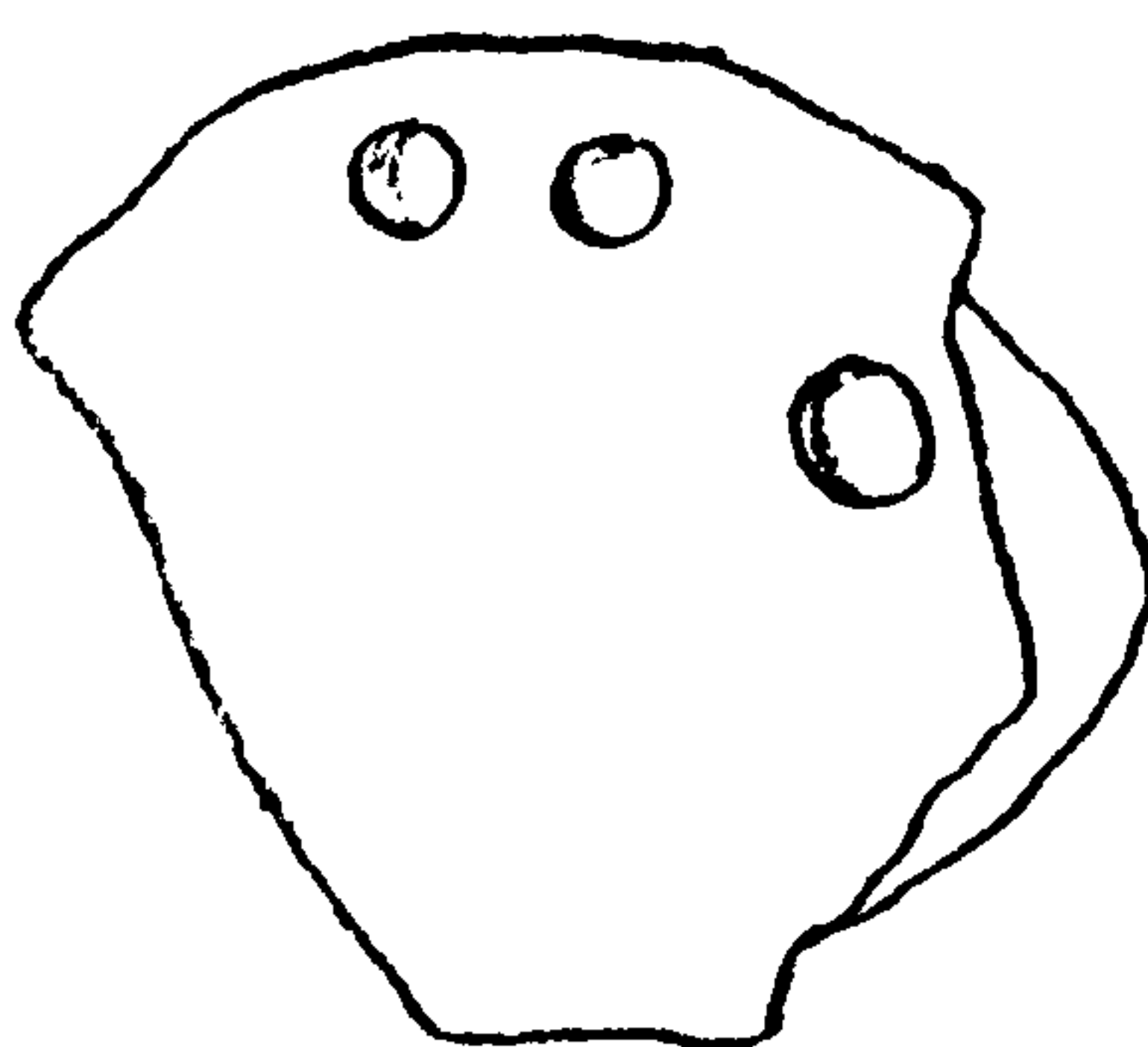
189



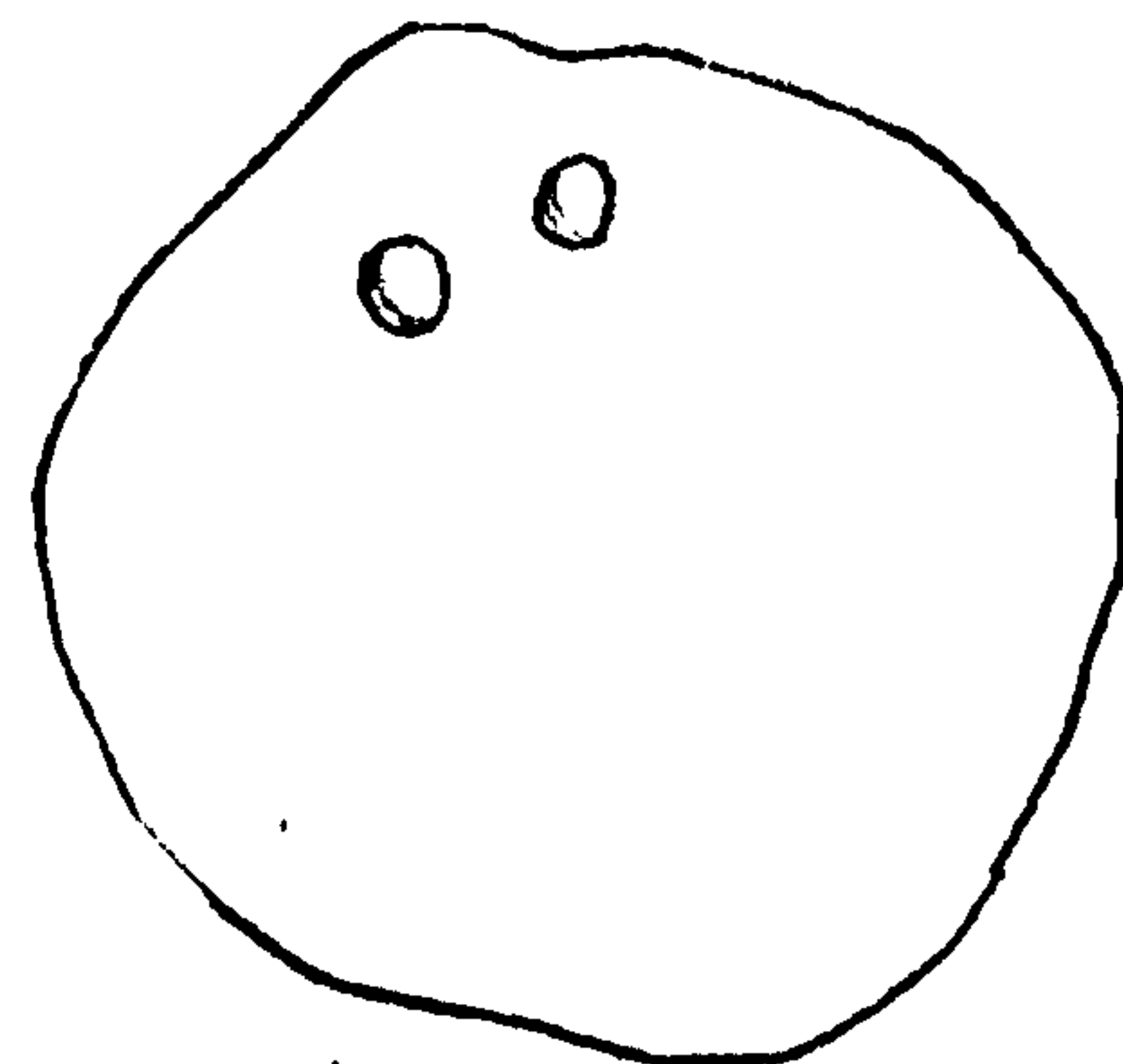
190



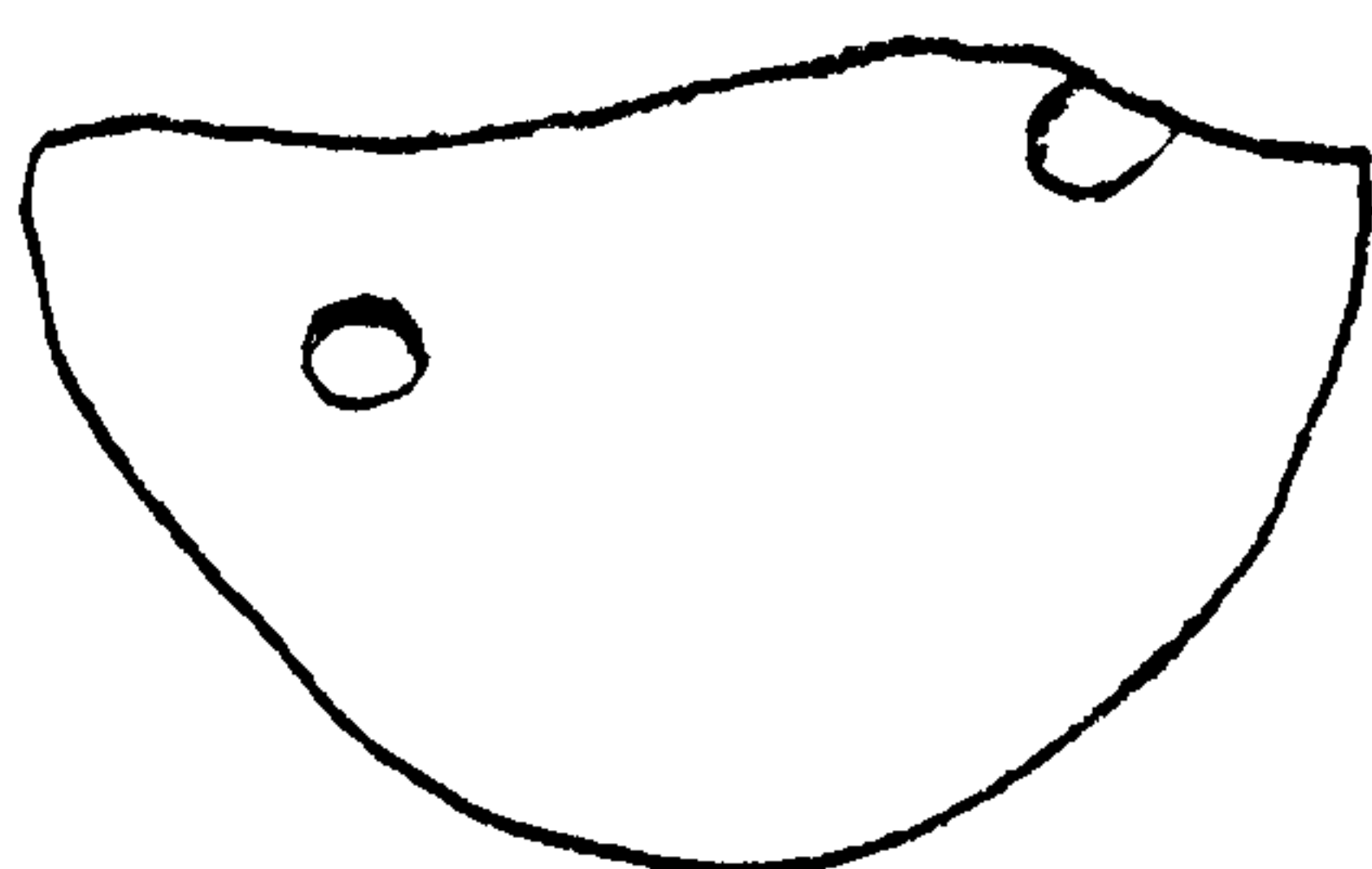
191



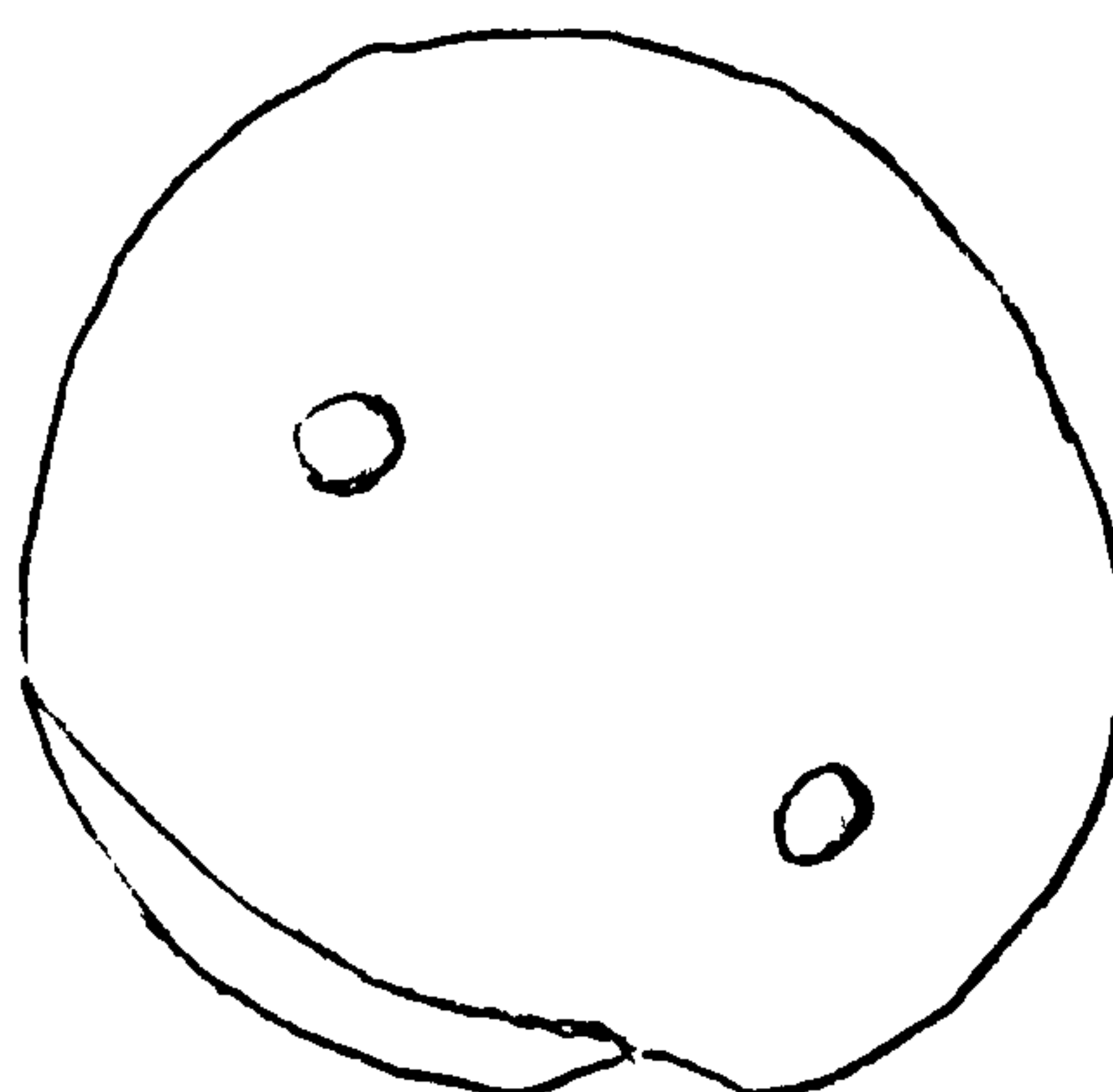
192



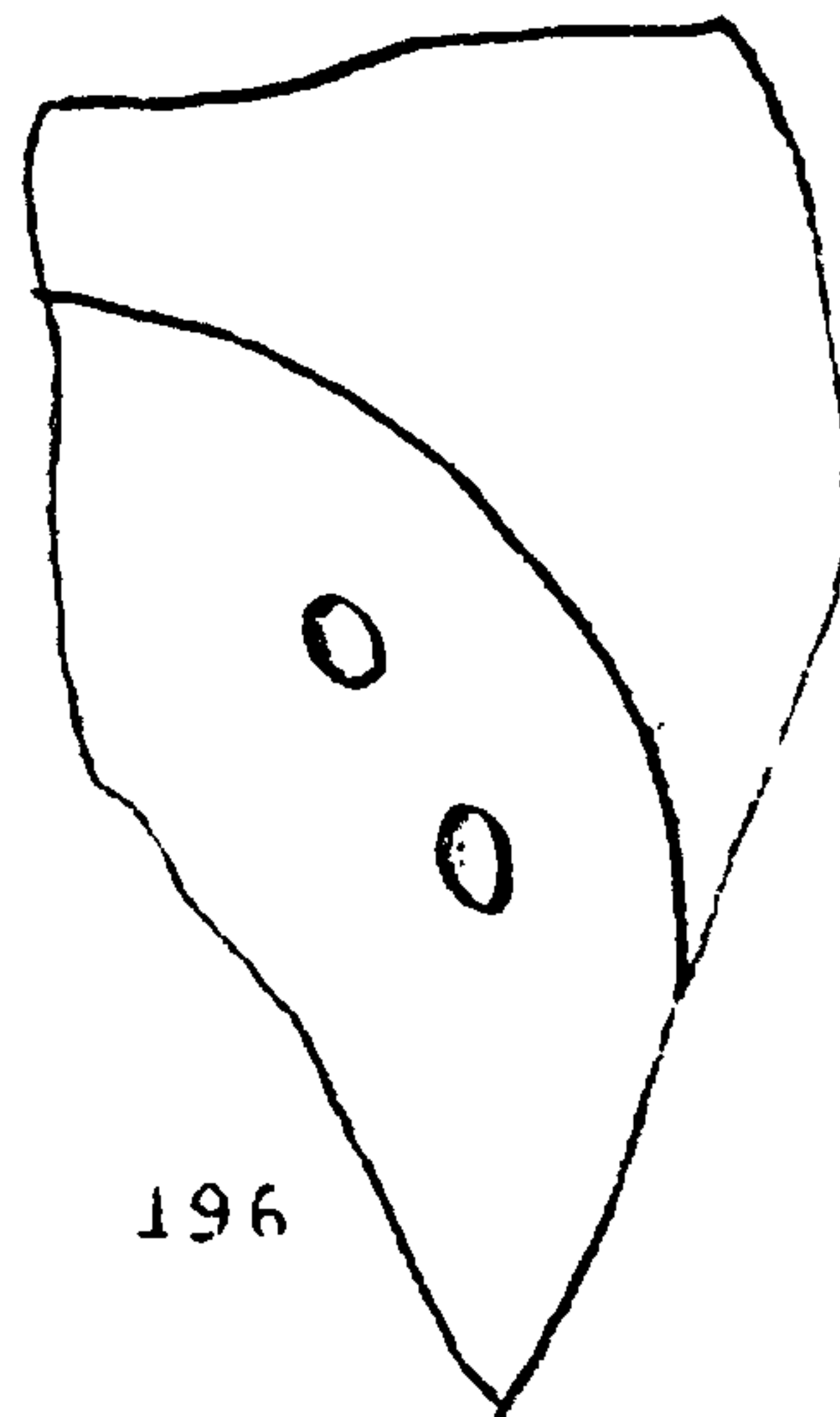
193



194



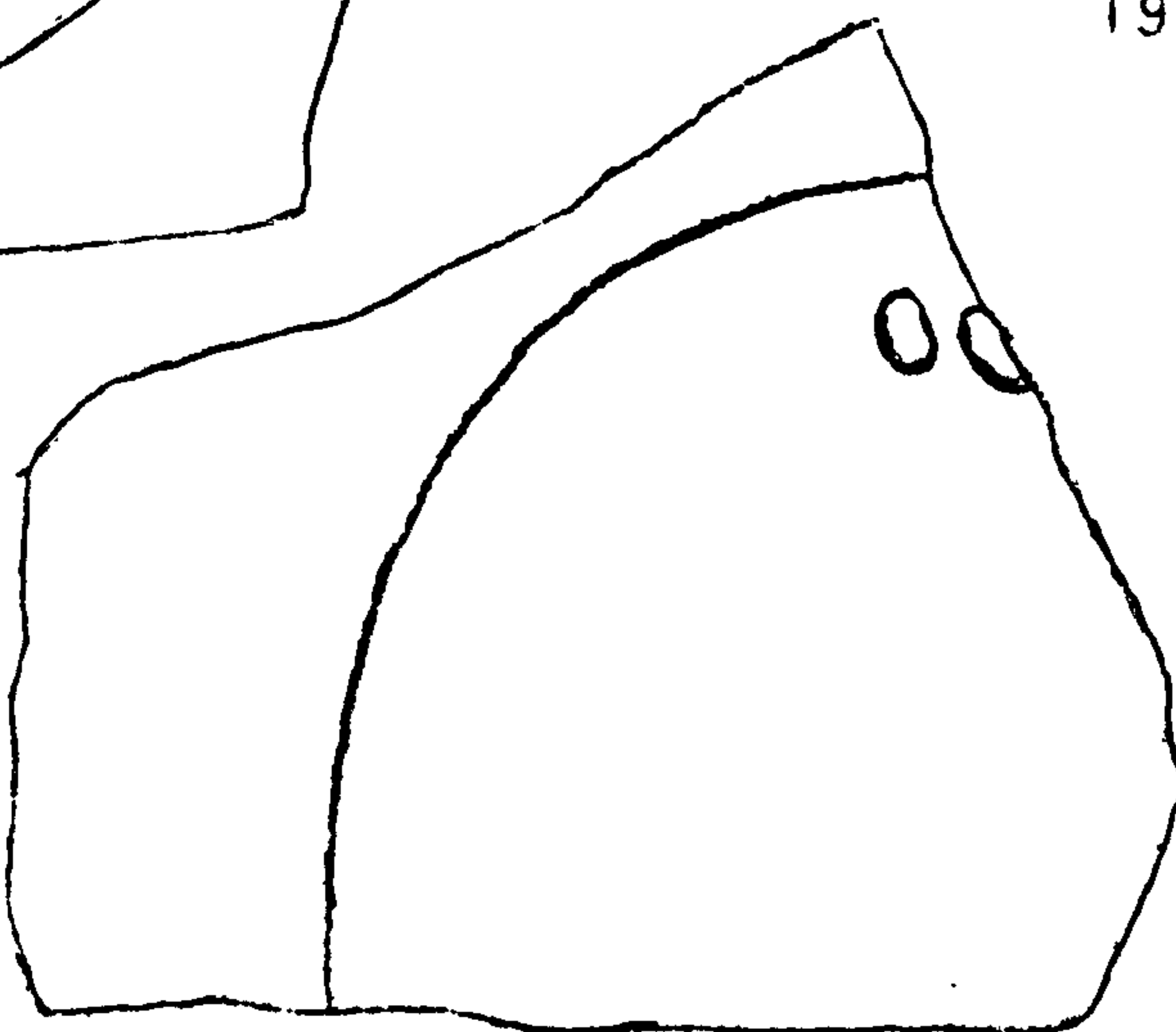
195



196



197

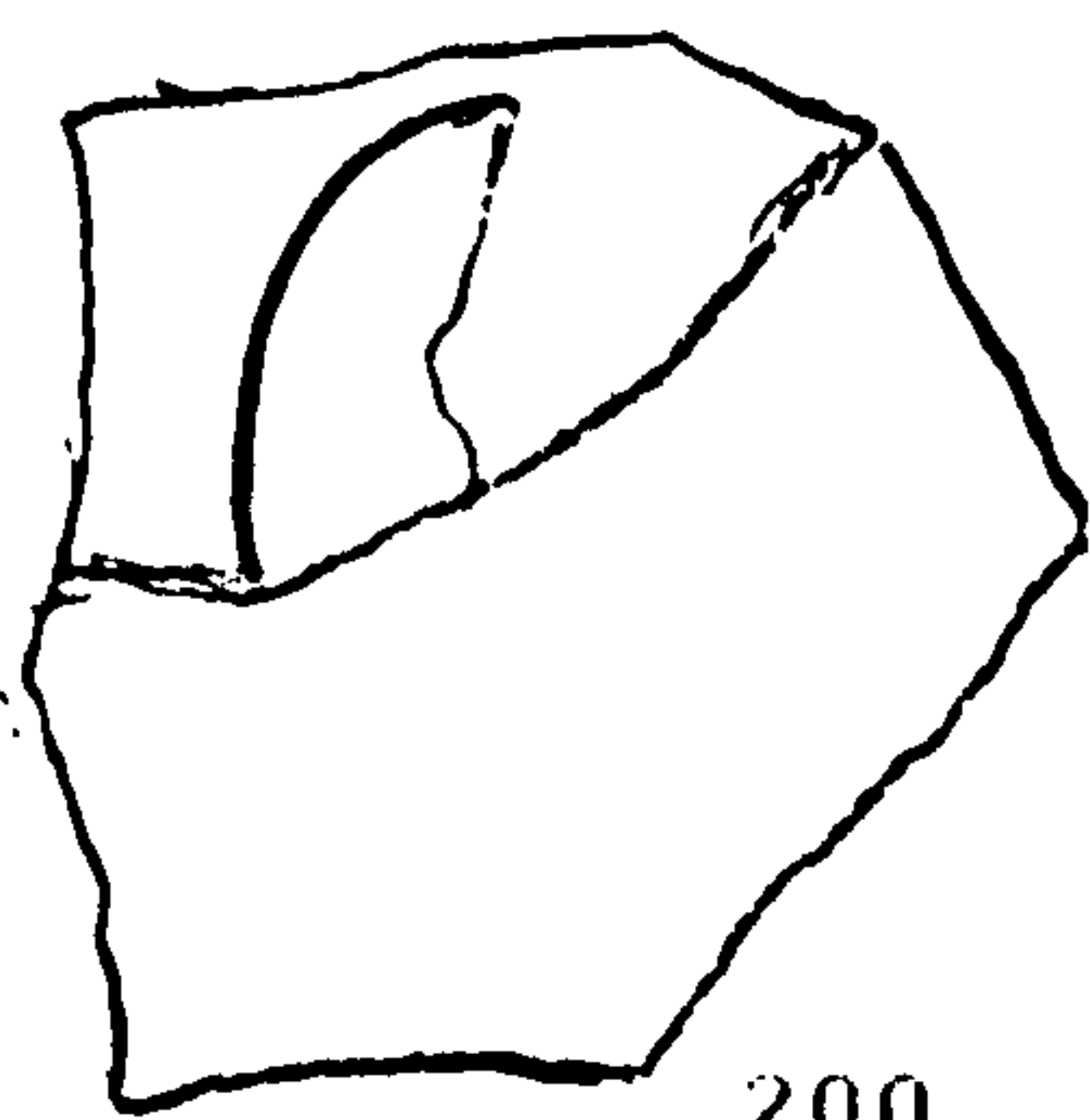


198

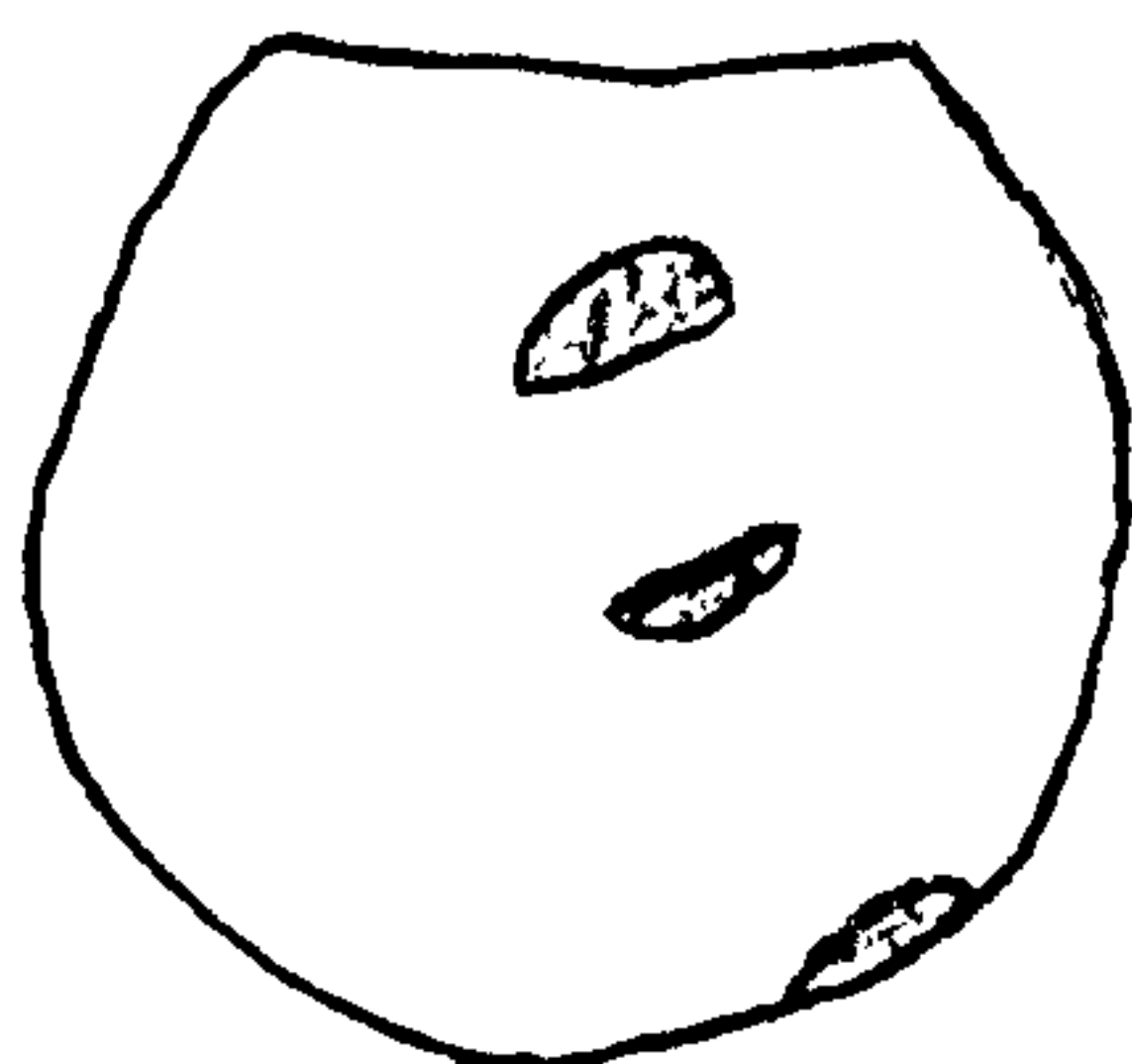


199

43. Phylakopi 1974-77 189-199. Scale 1:1



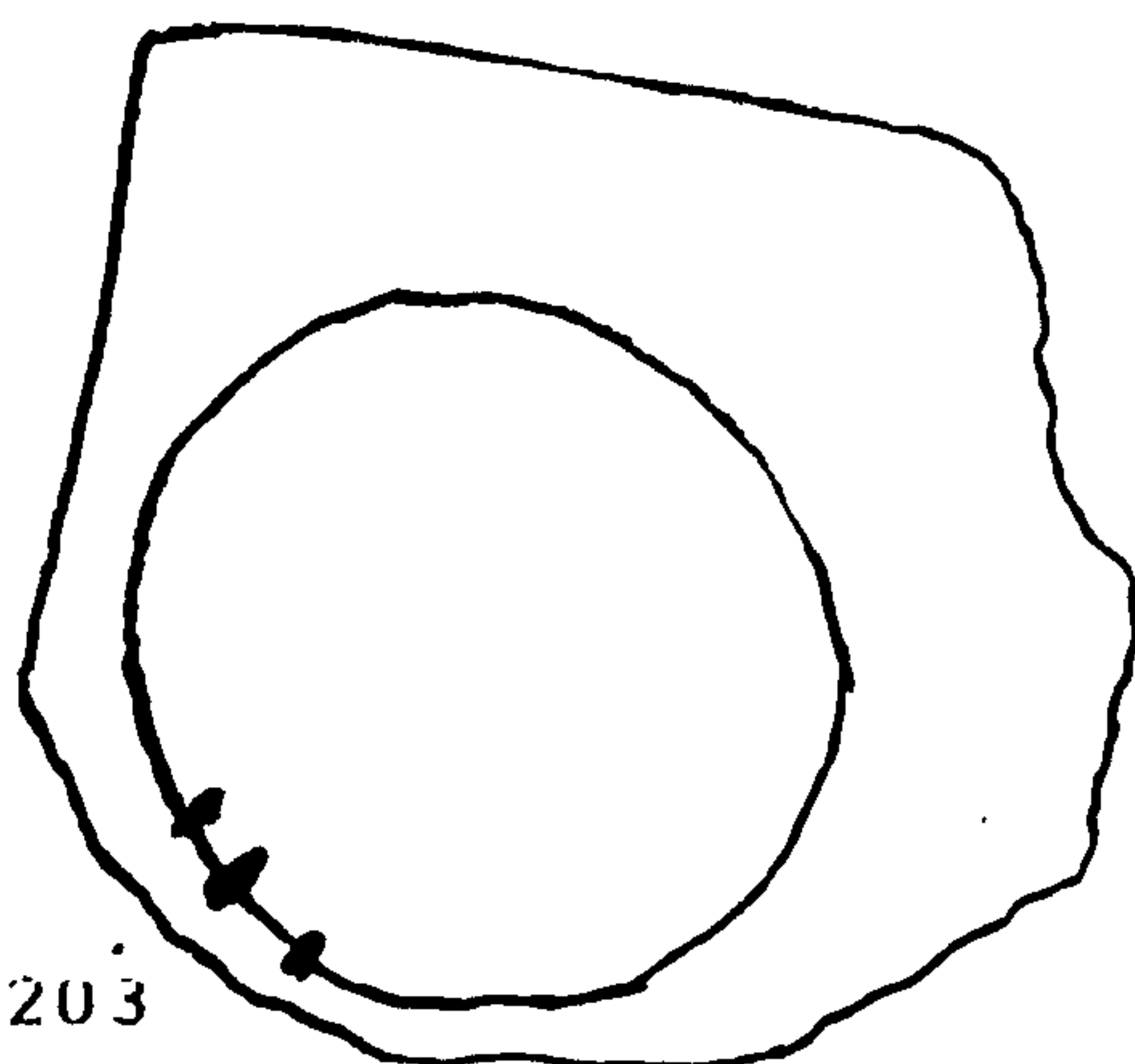
200



201



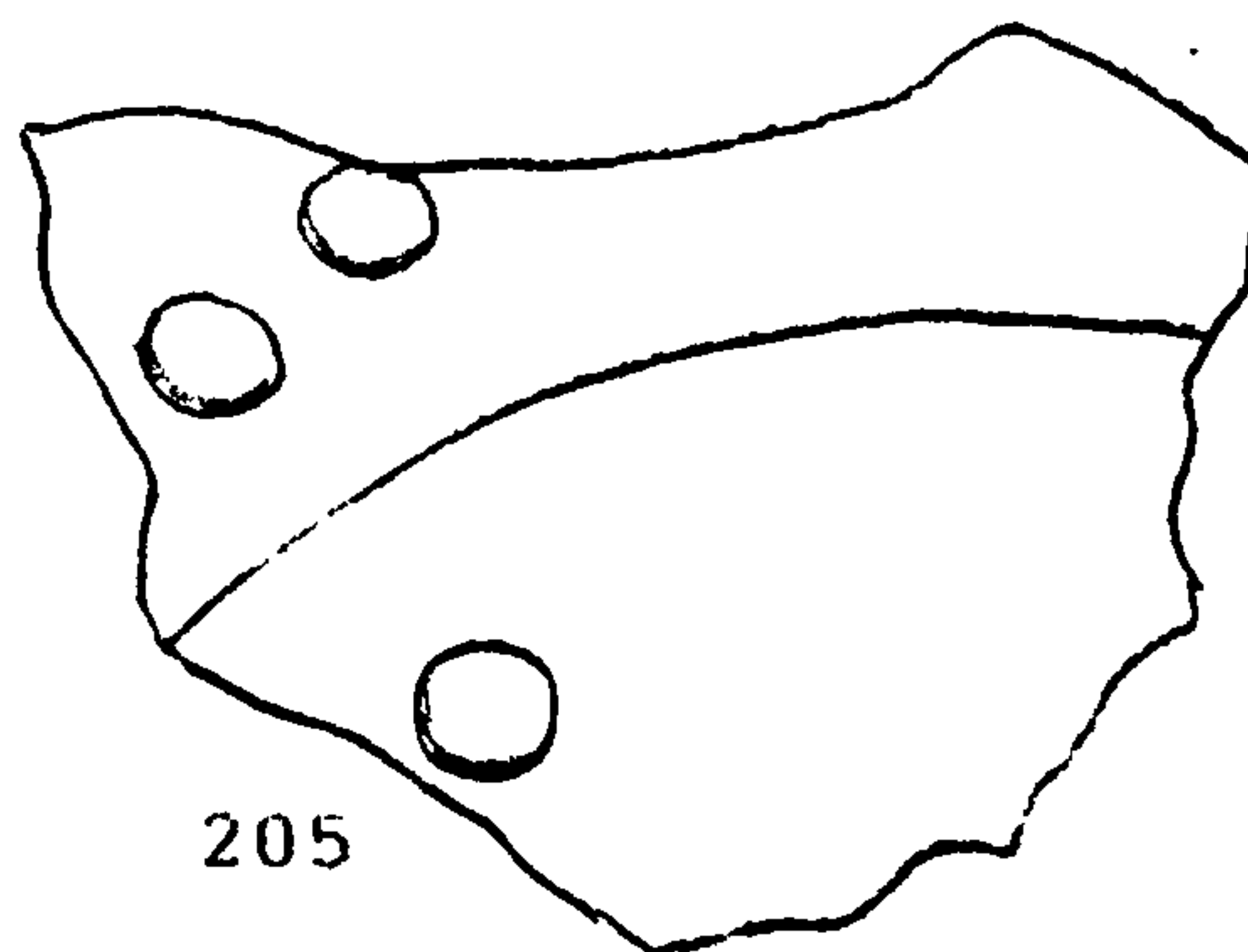
202



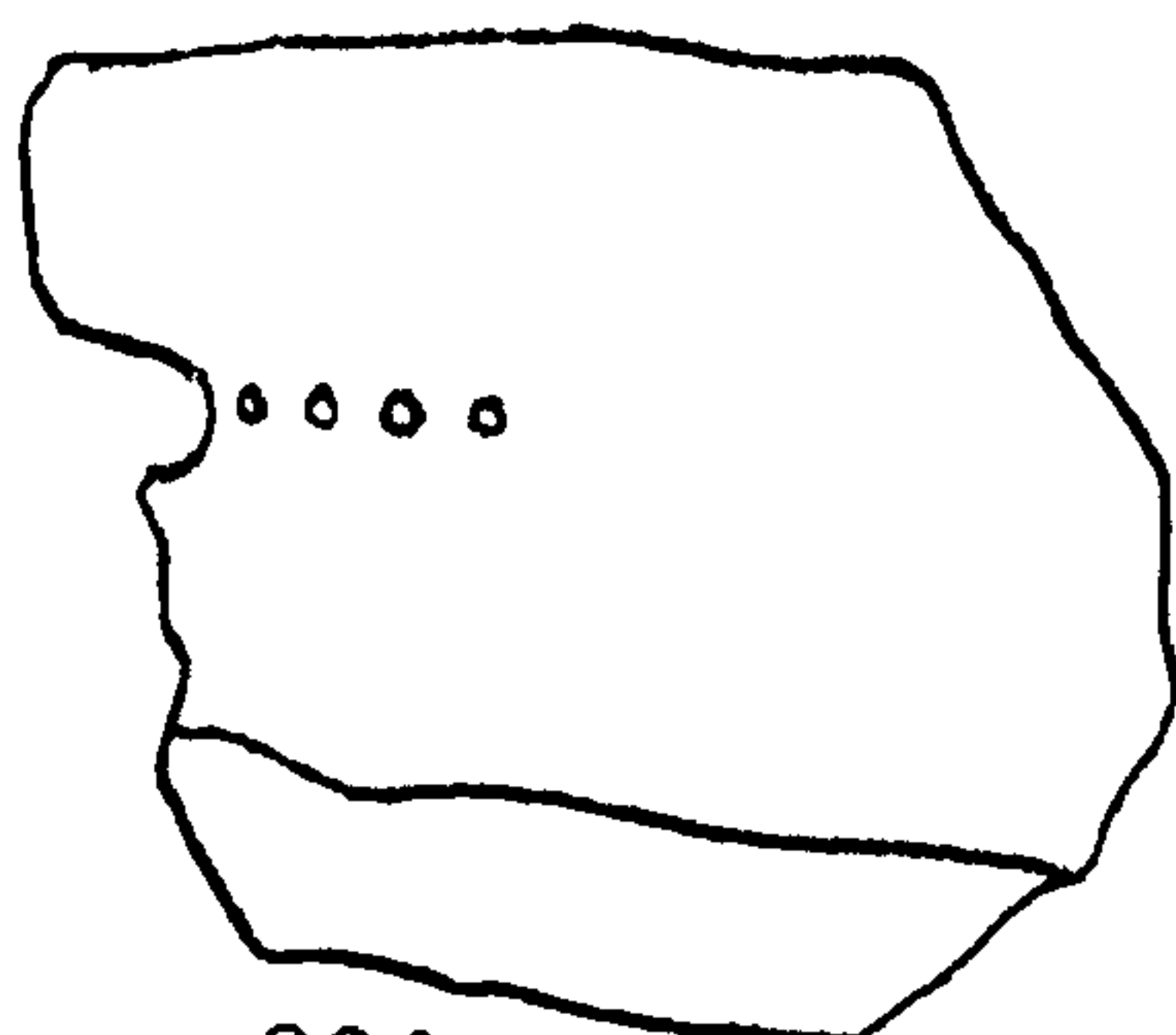
203



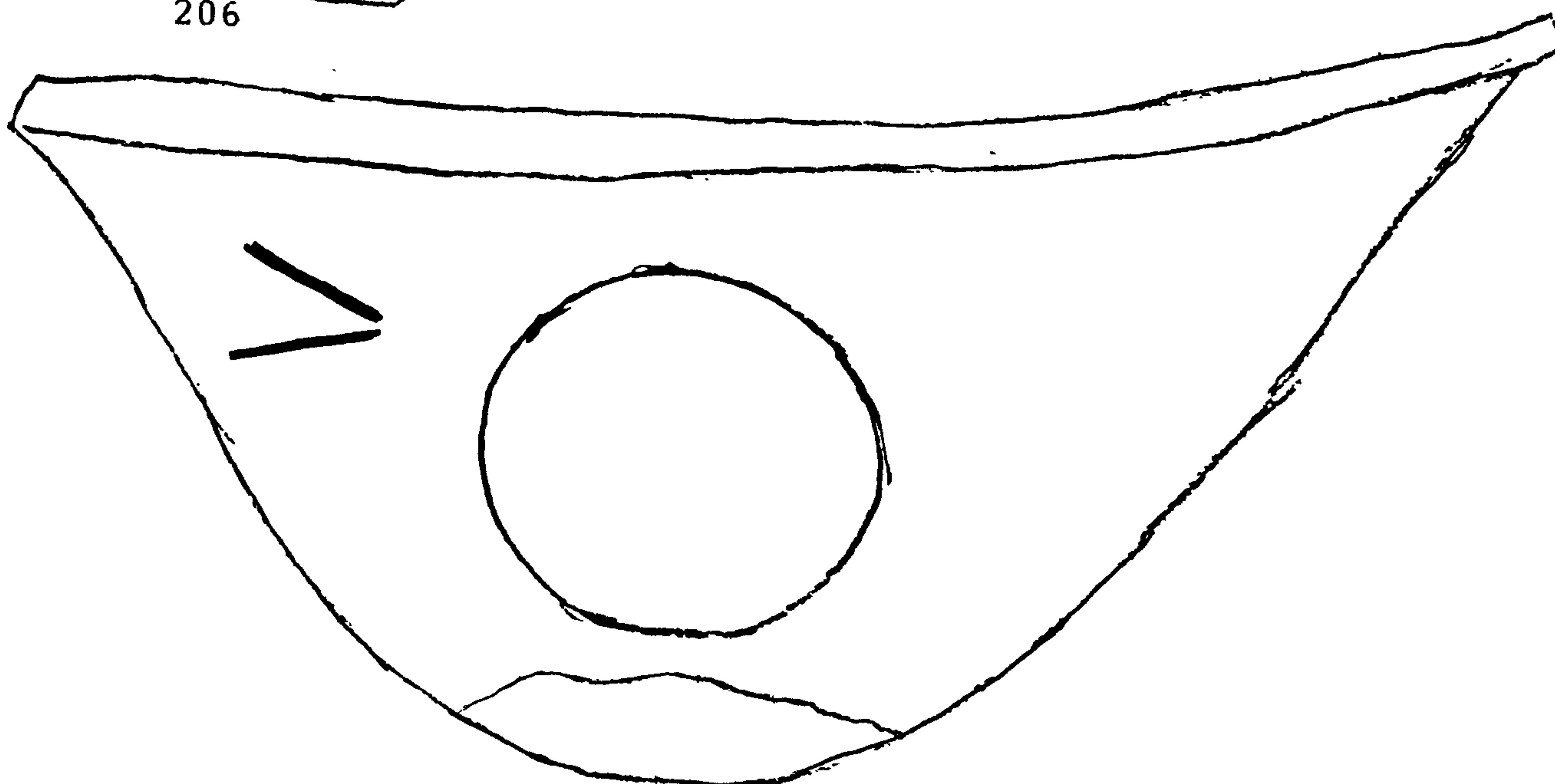
204



205

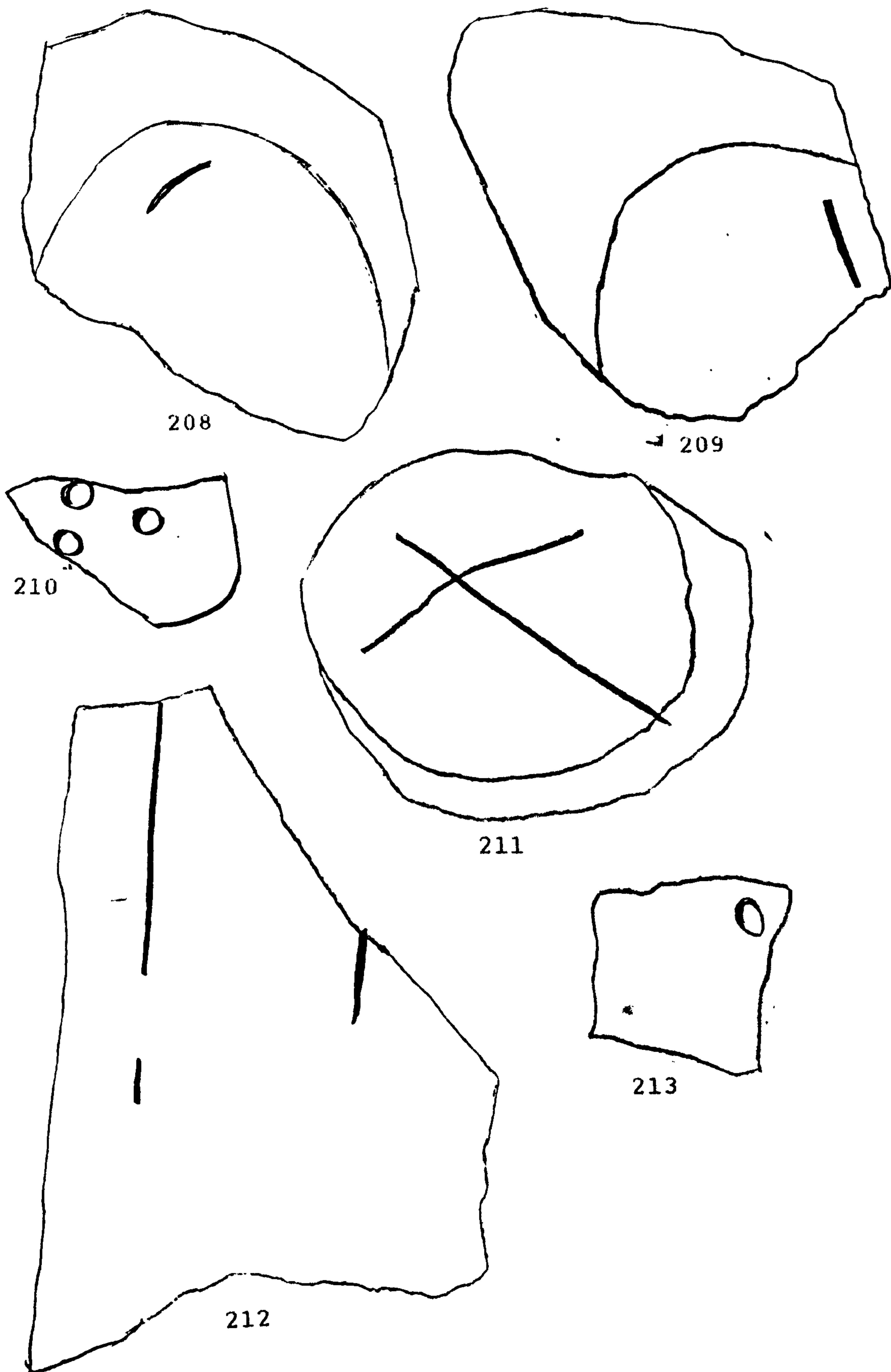


206

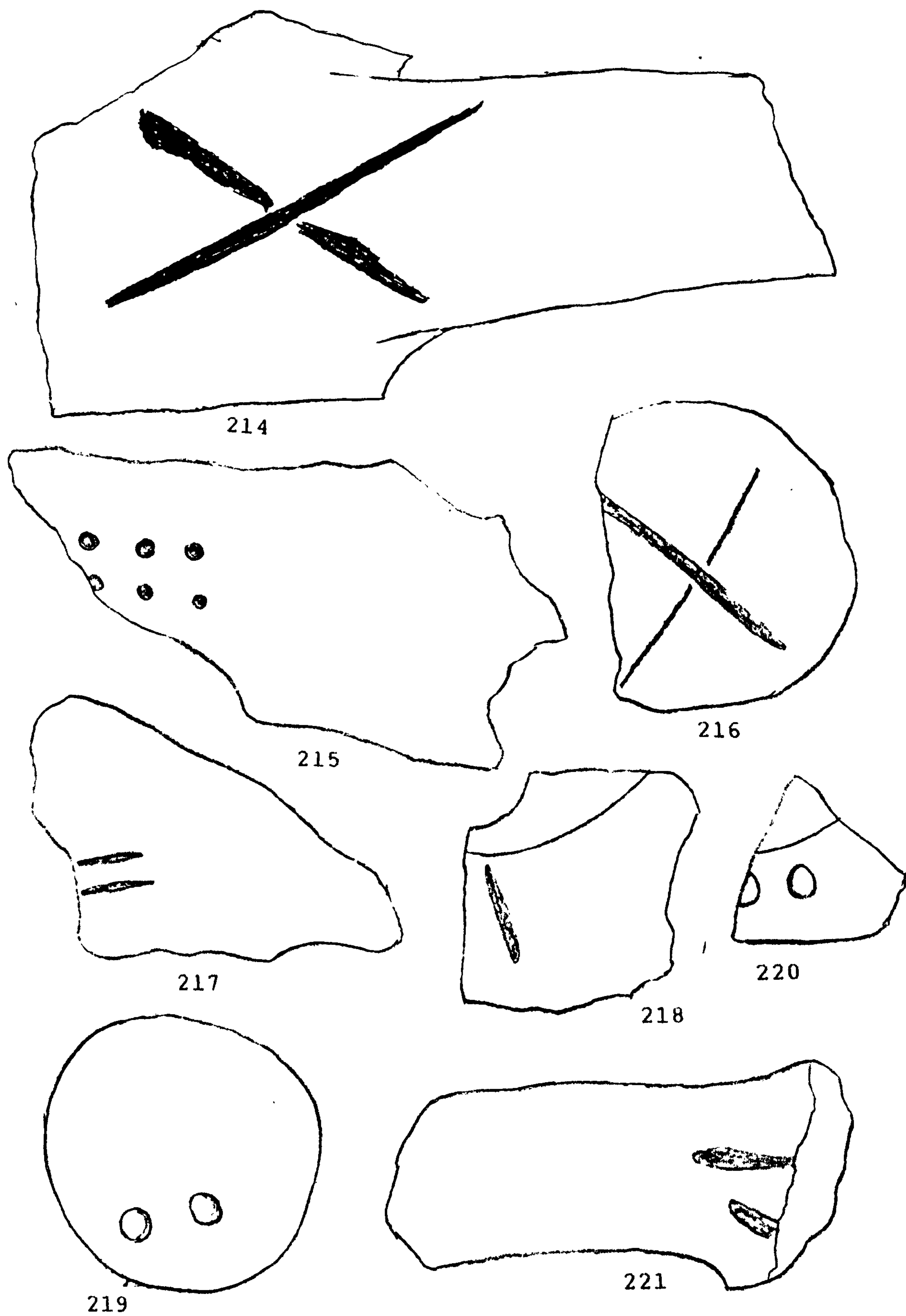


207

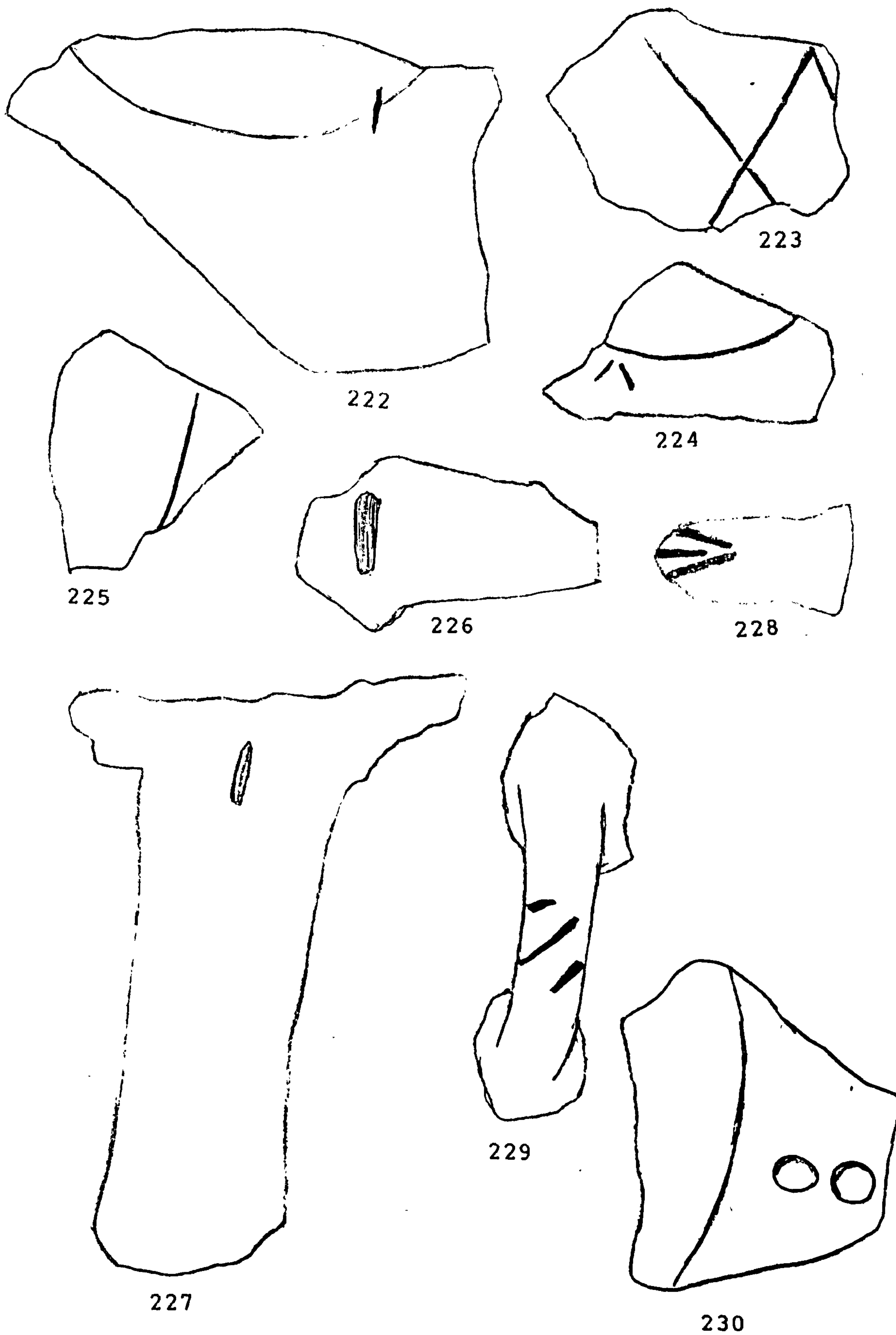
44. Phylakopi 1974-77 200-207. Scale 1:1



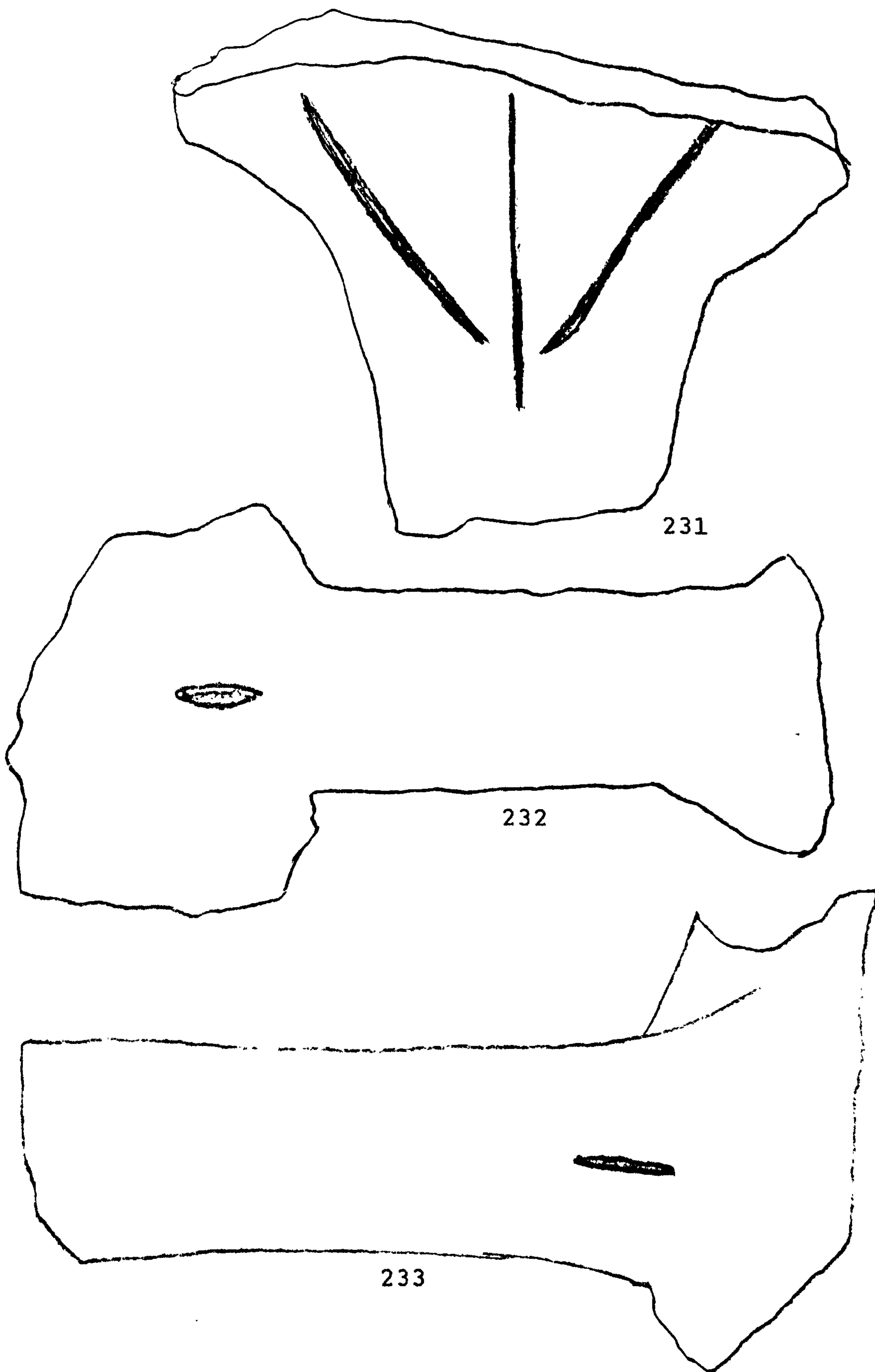
45. Phylakopi 1974-77 208-213. Scale 1:1



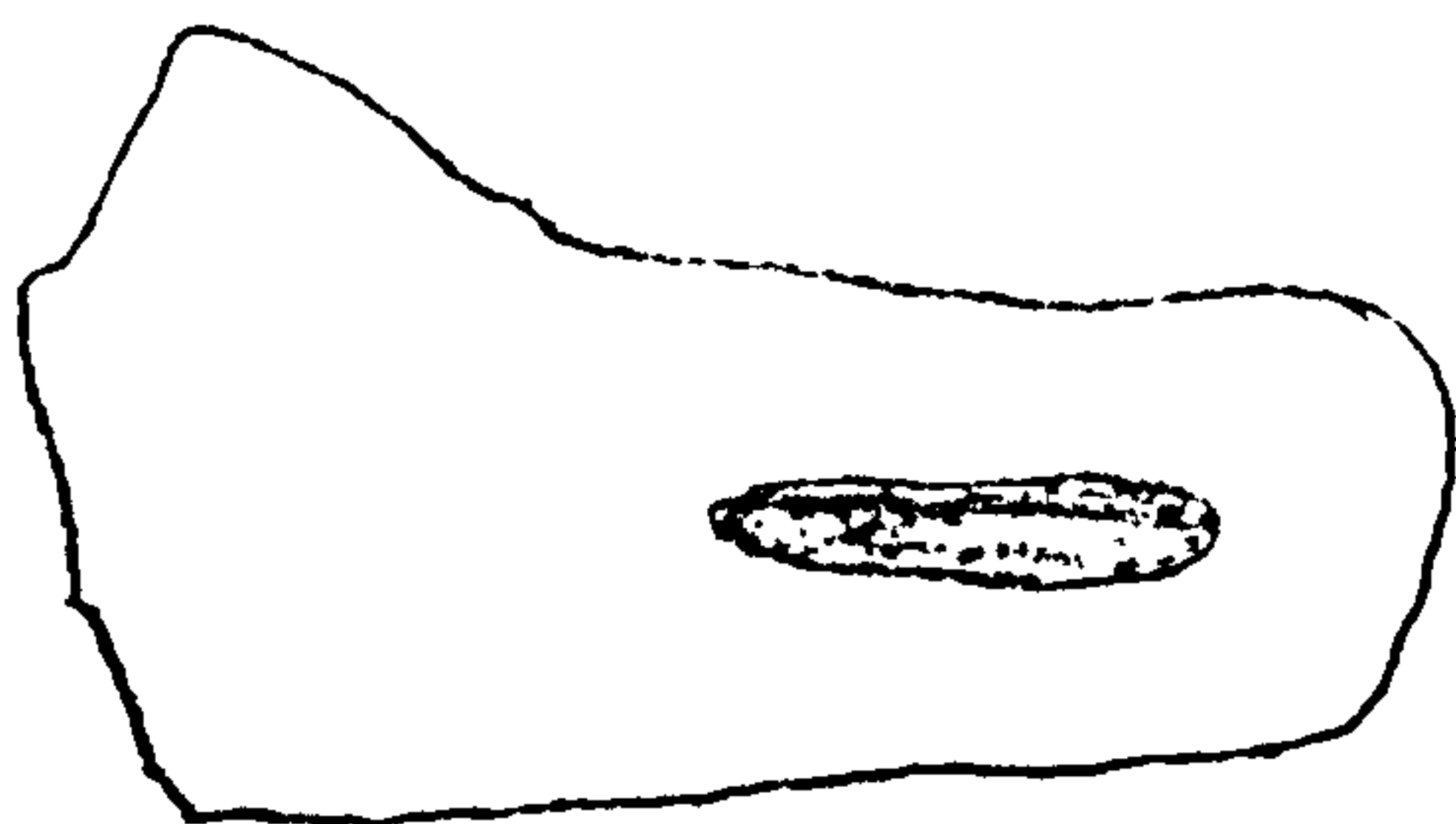
46. Phylakopi 1974-77 214-221. Scale 1:1



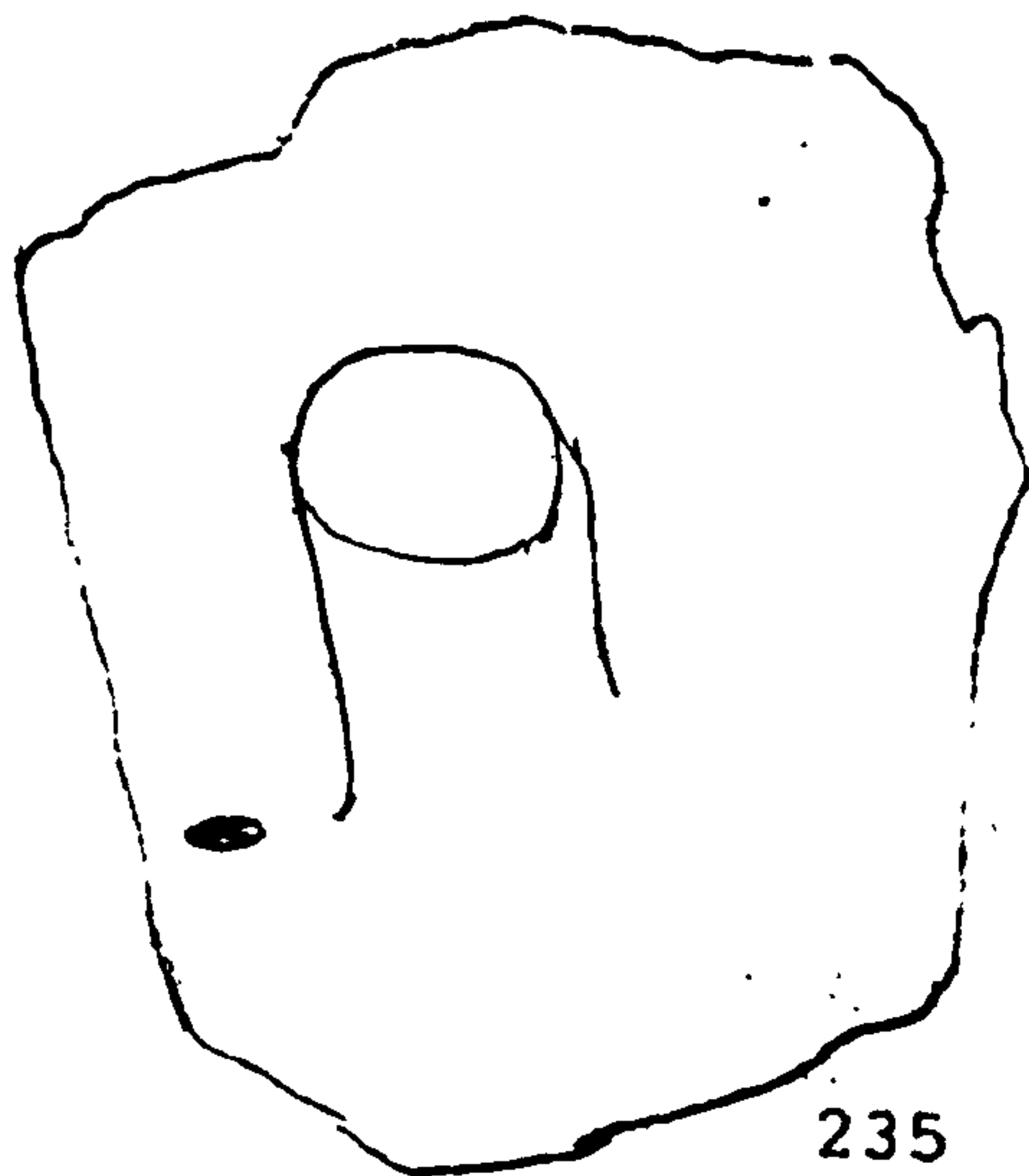
47. Phylakopi 1974-77 222-230. Scale 1:1



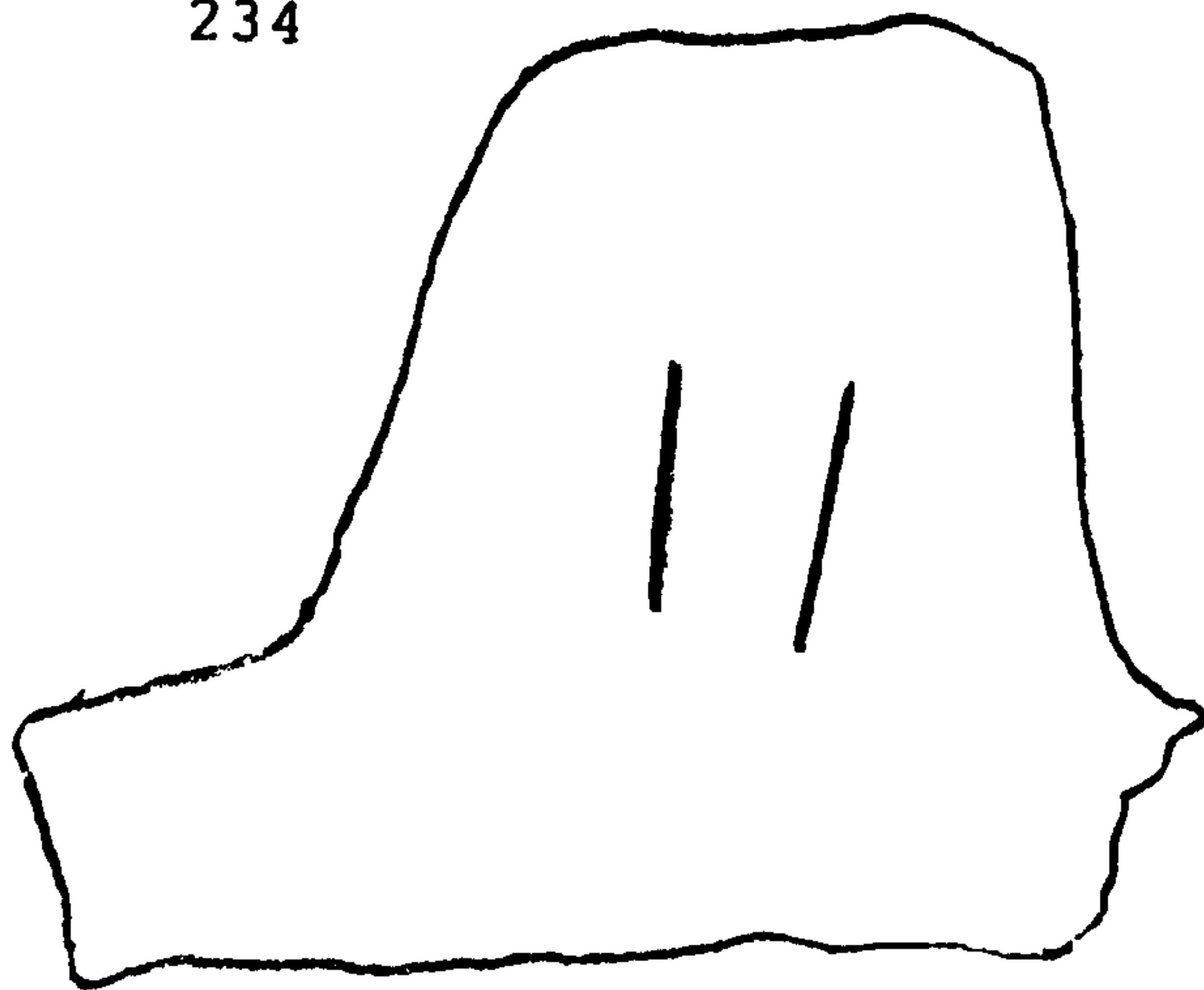
48. Phylakopi 1974-77 231-233. Scale 1:1



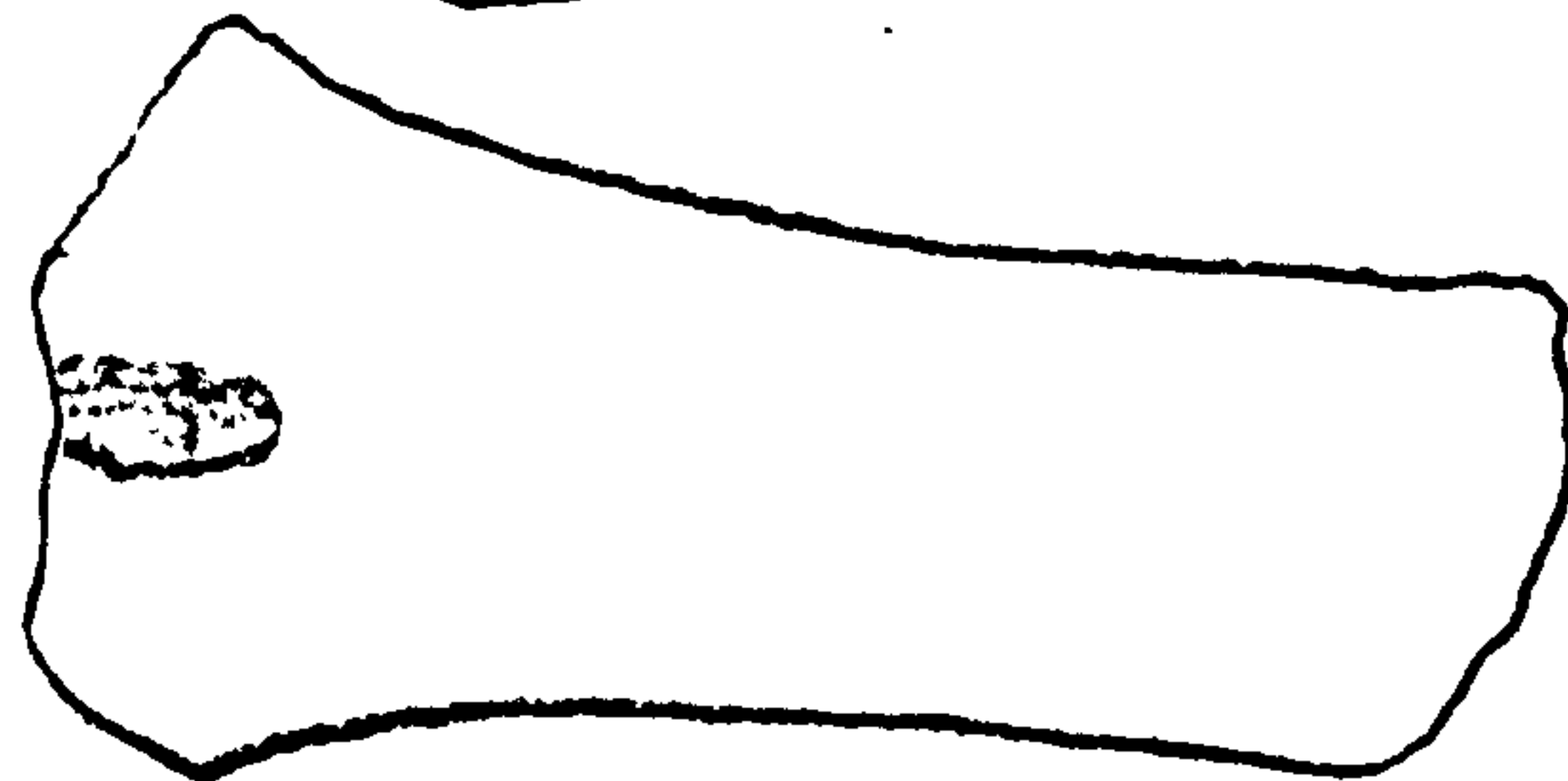
234



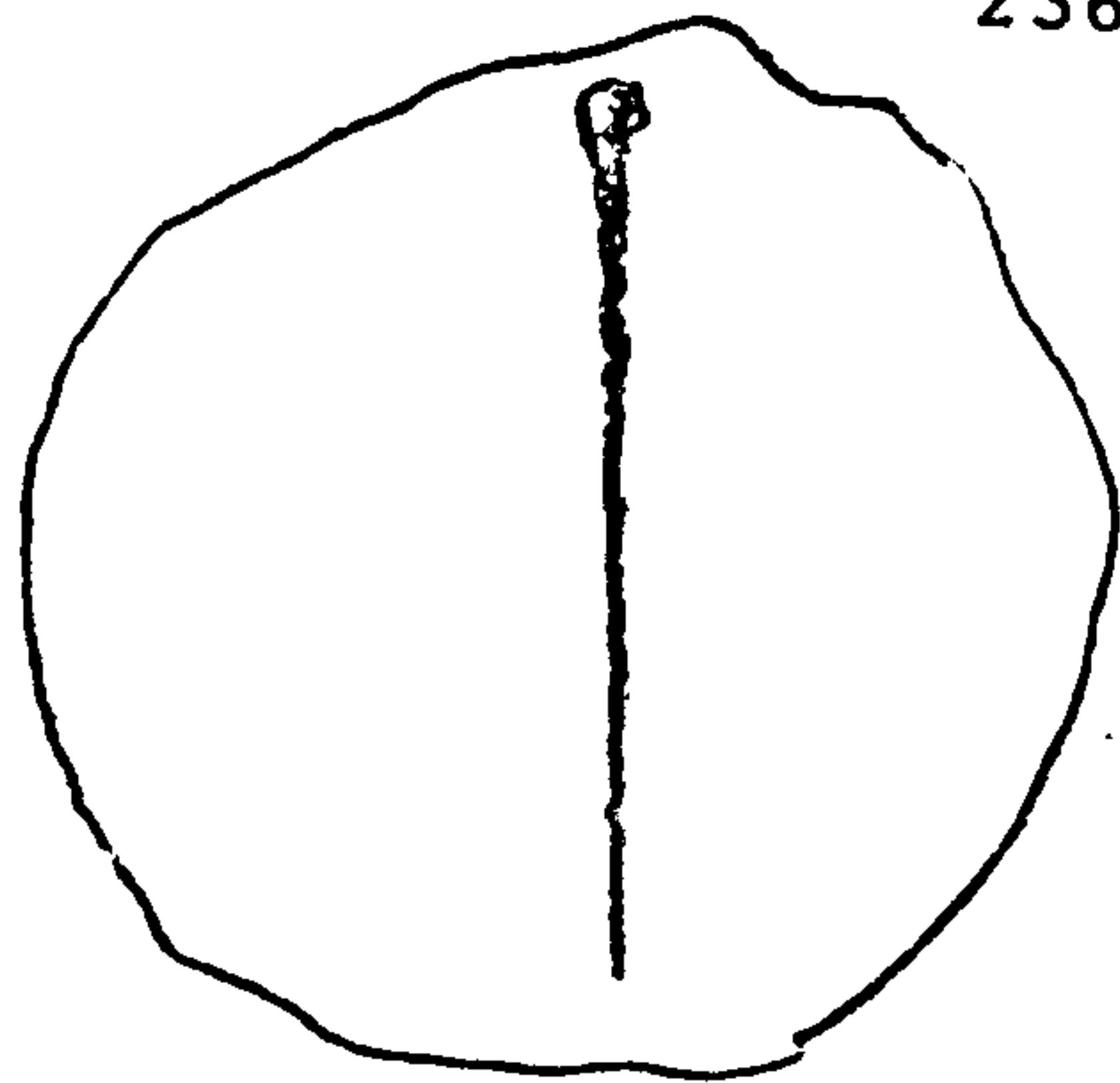
235



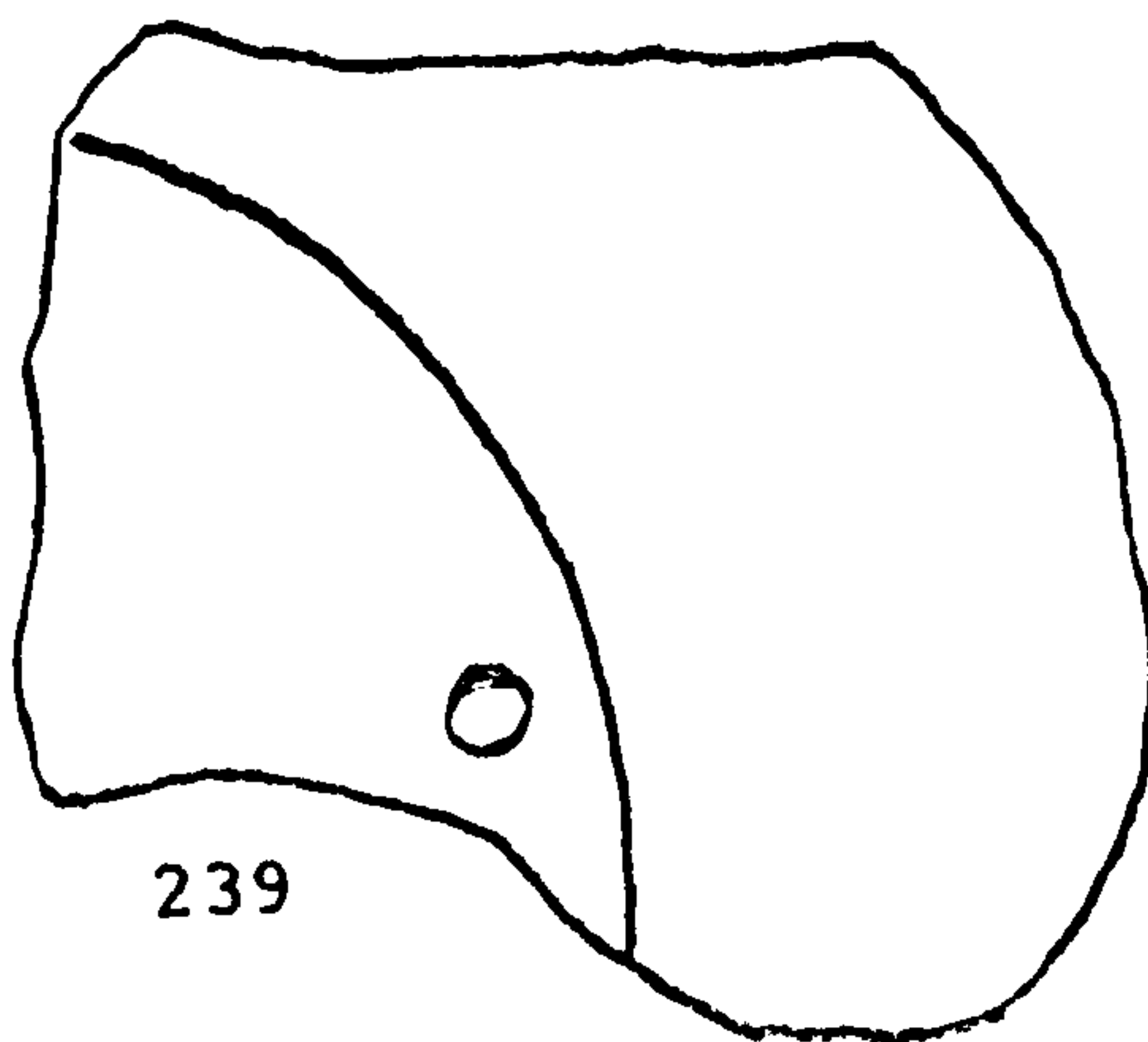
236



237



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239

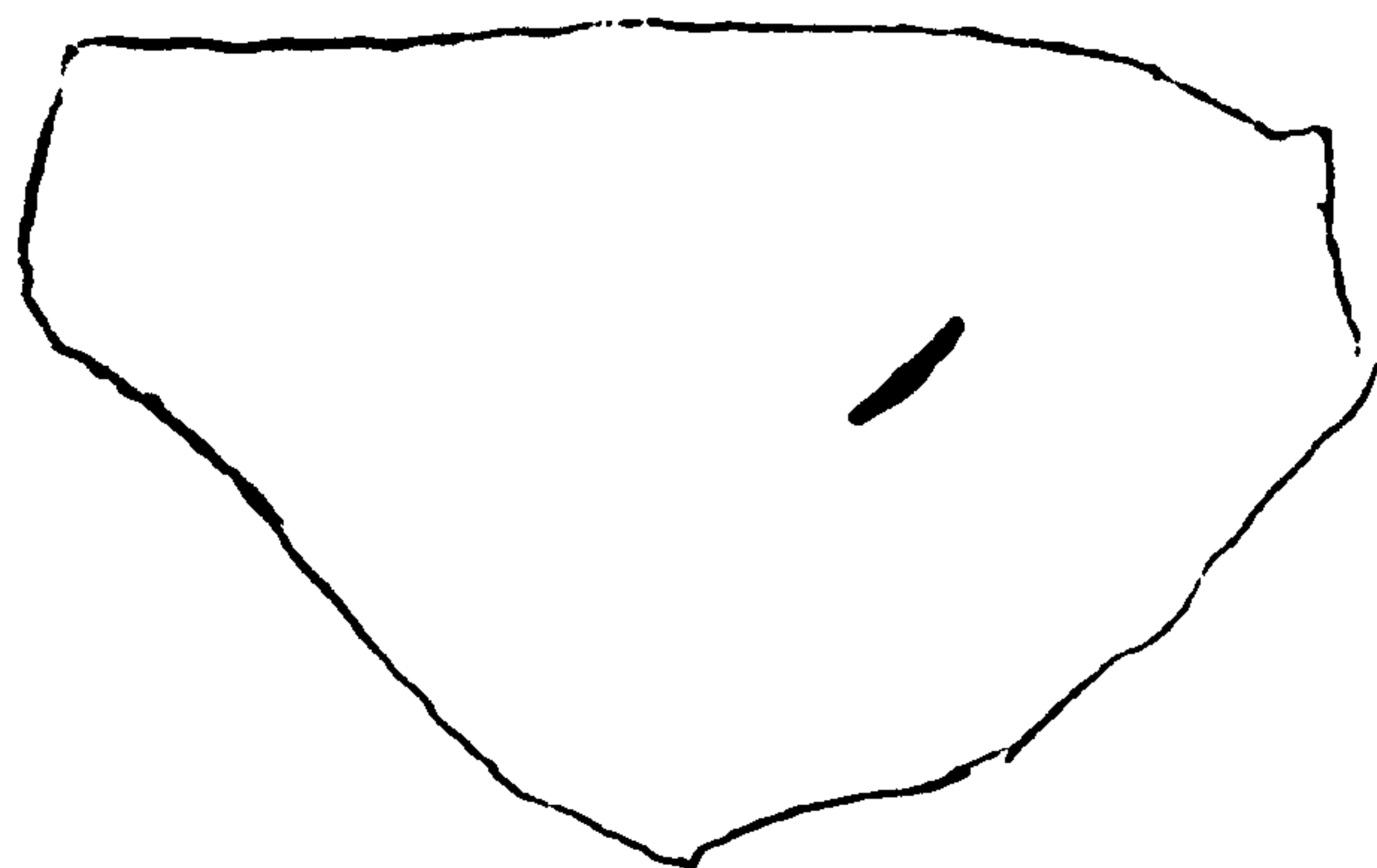


240

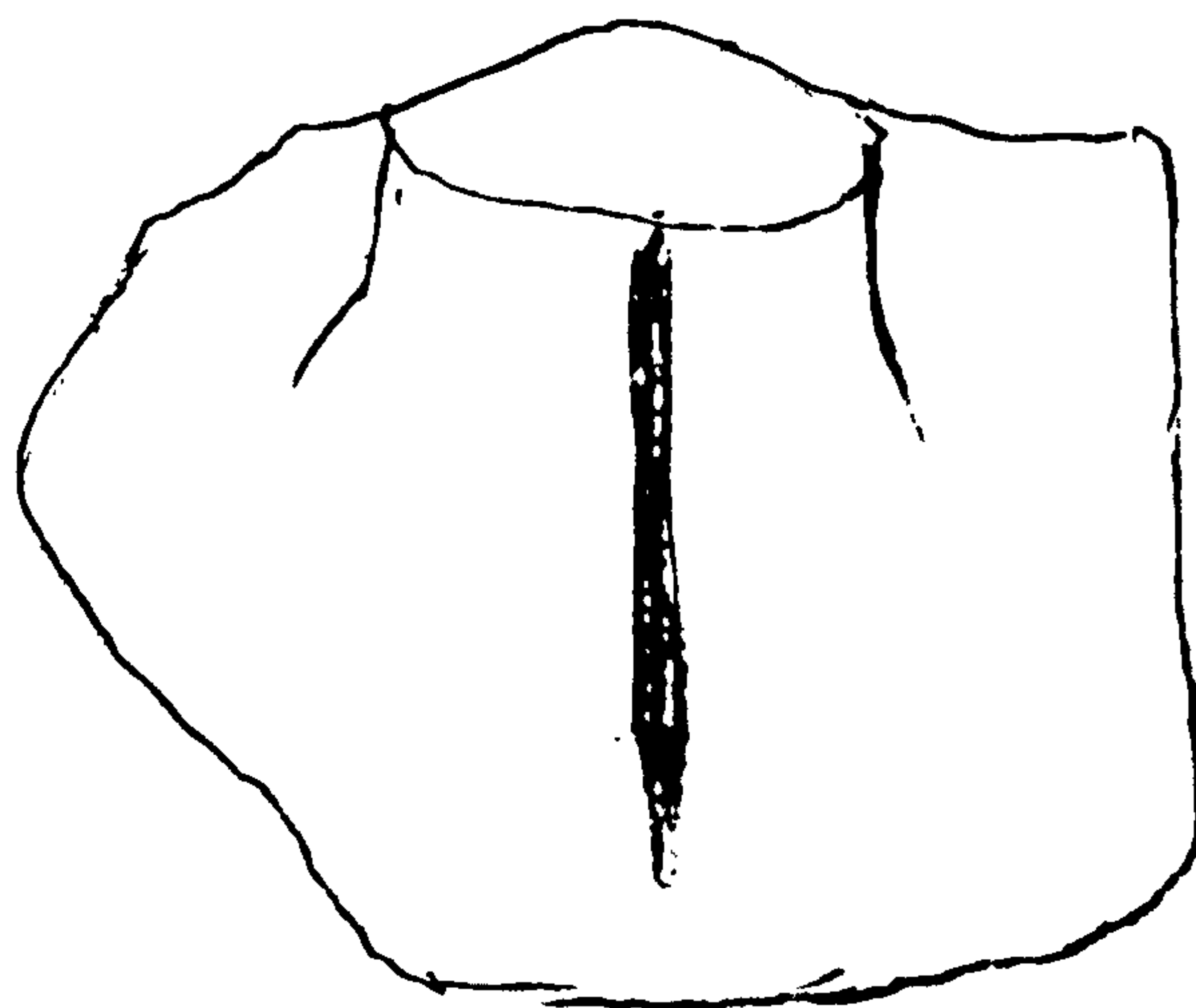


241

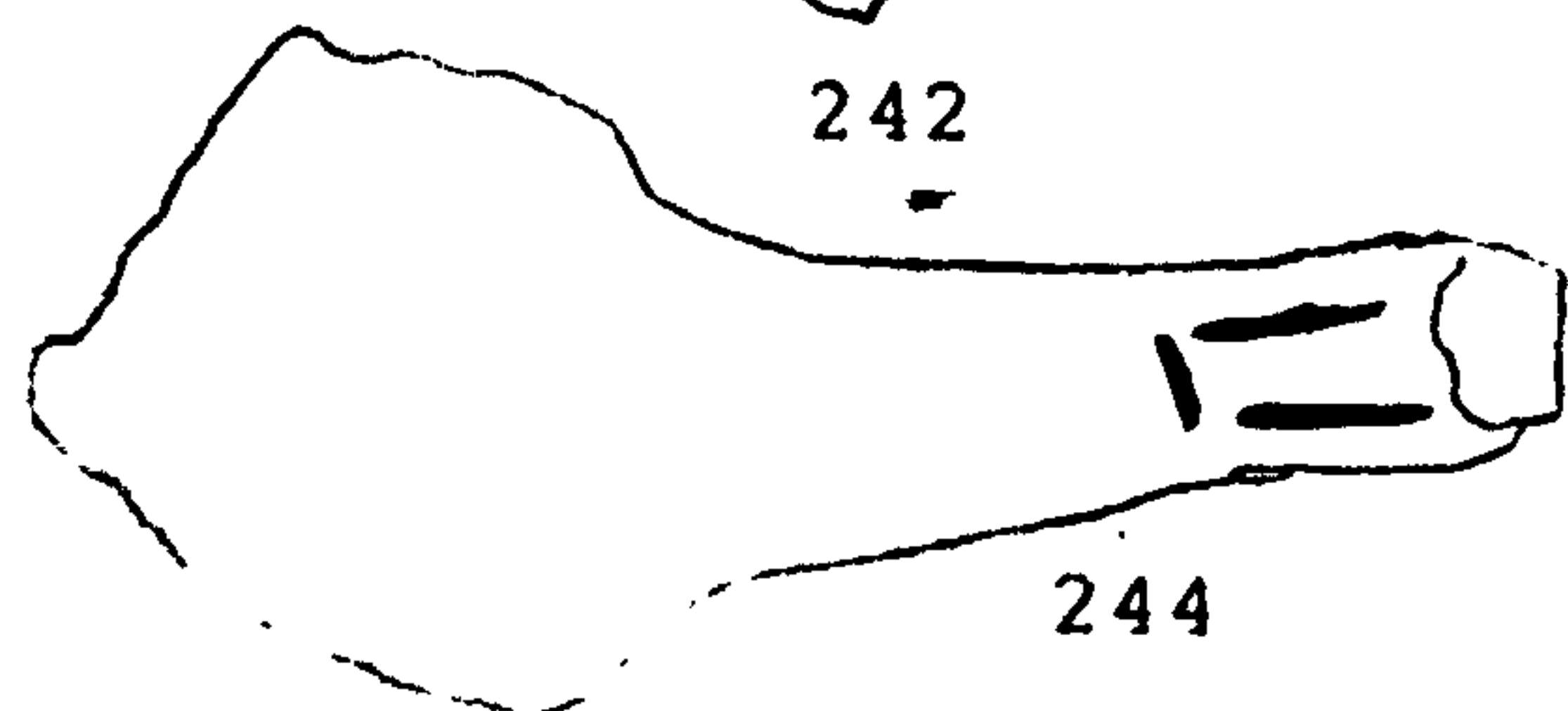
49. Phylakopi 1974-77 234-241. Scale 1:1



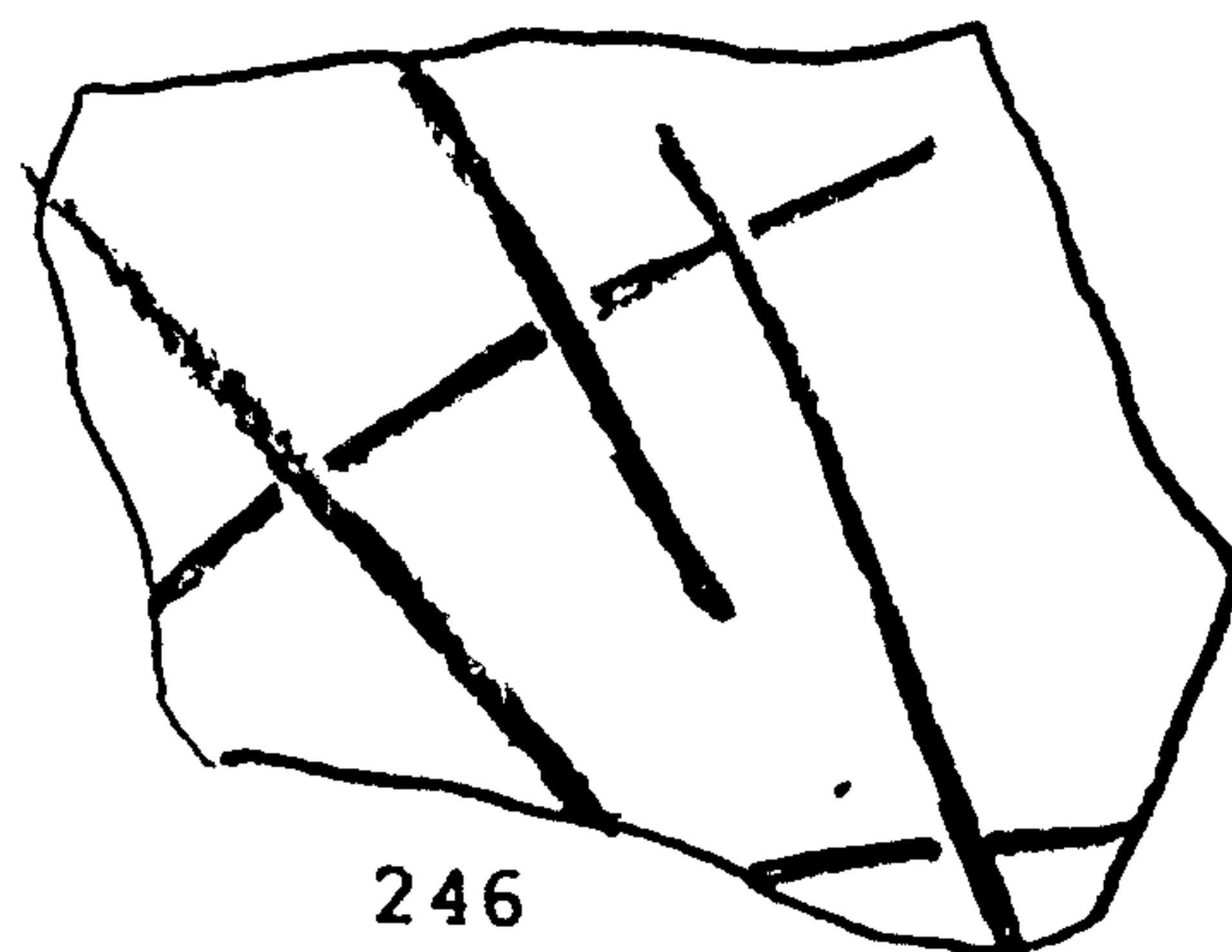
242



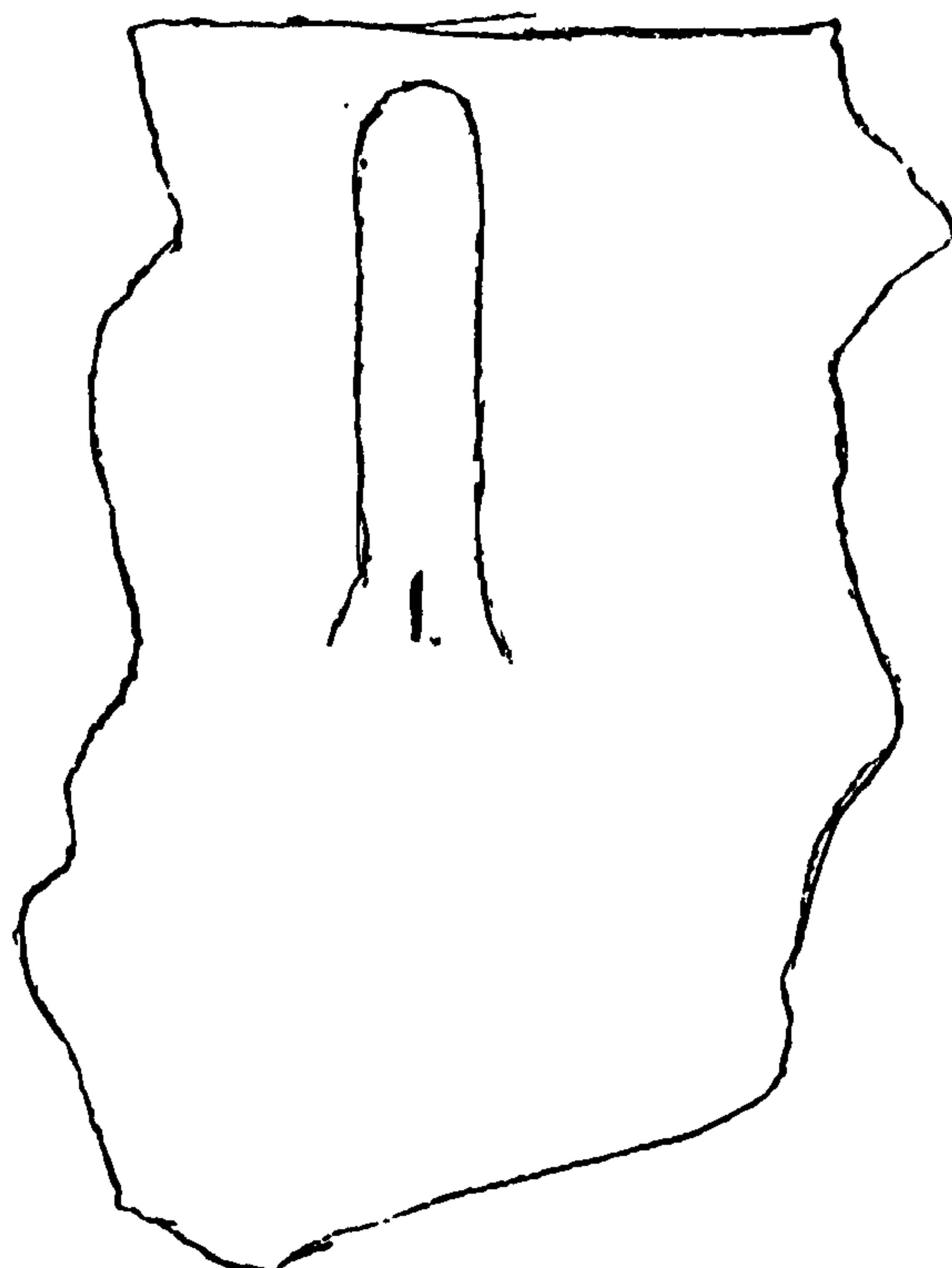
243



244



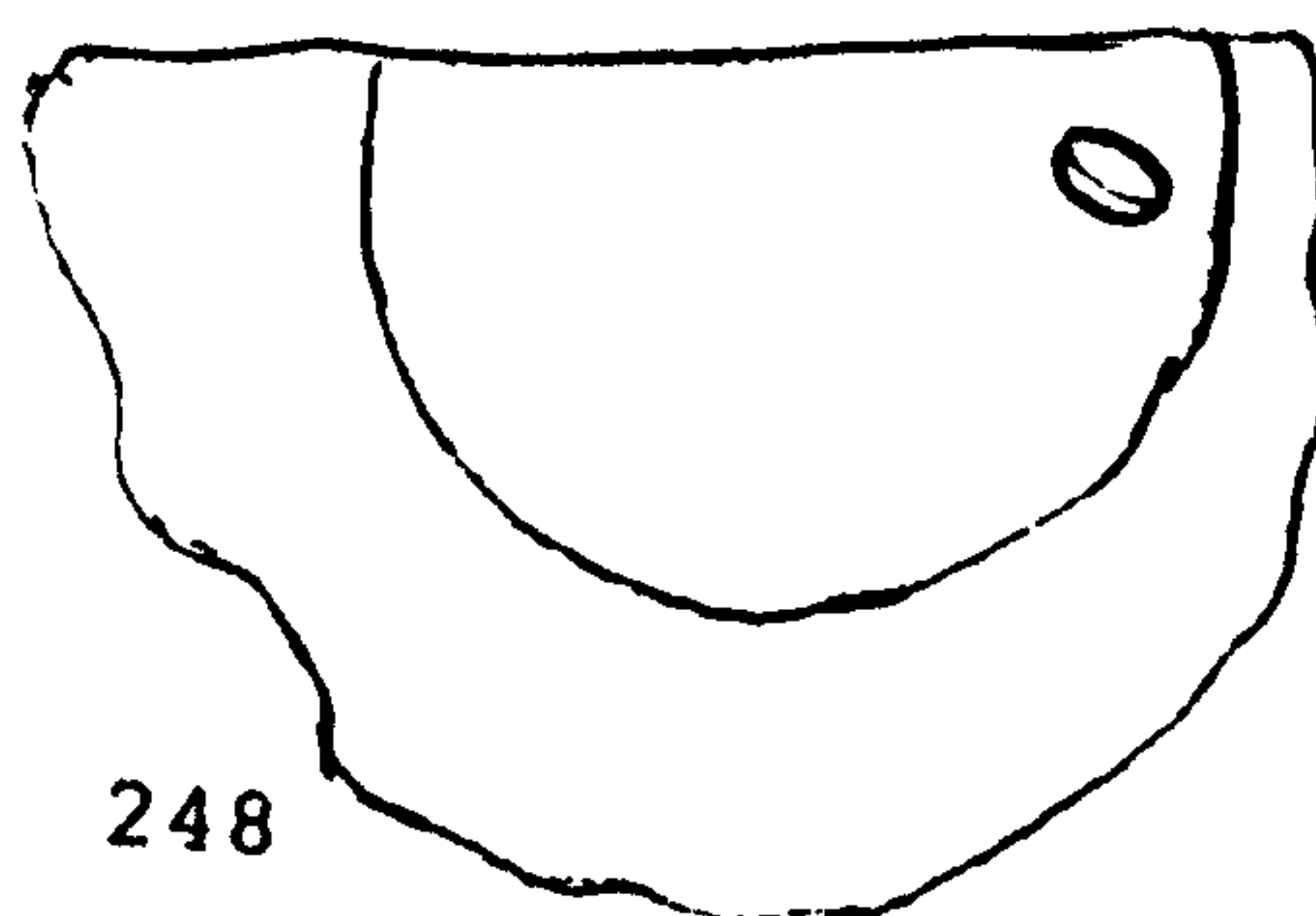
246



245 1:2

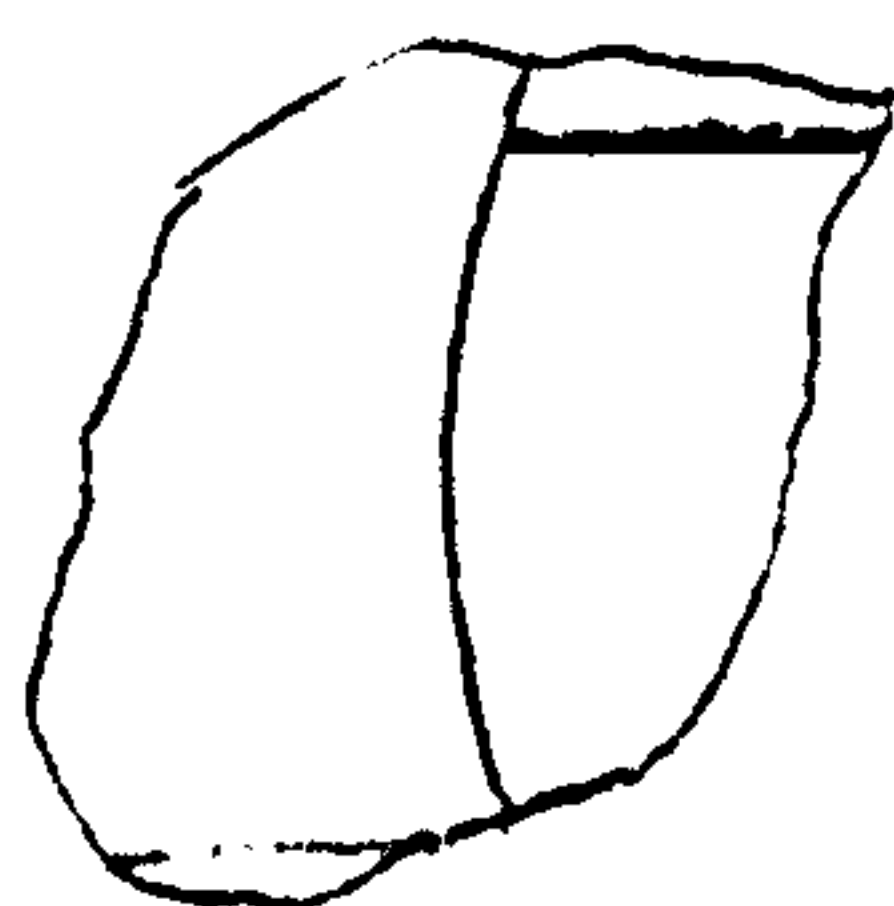


247

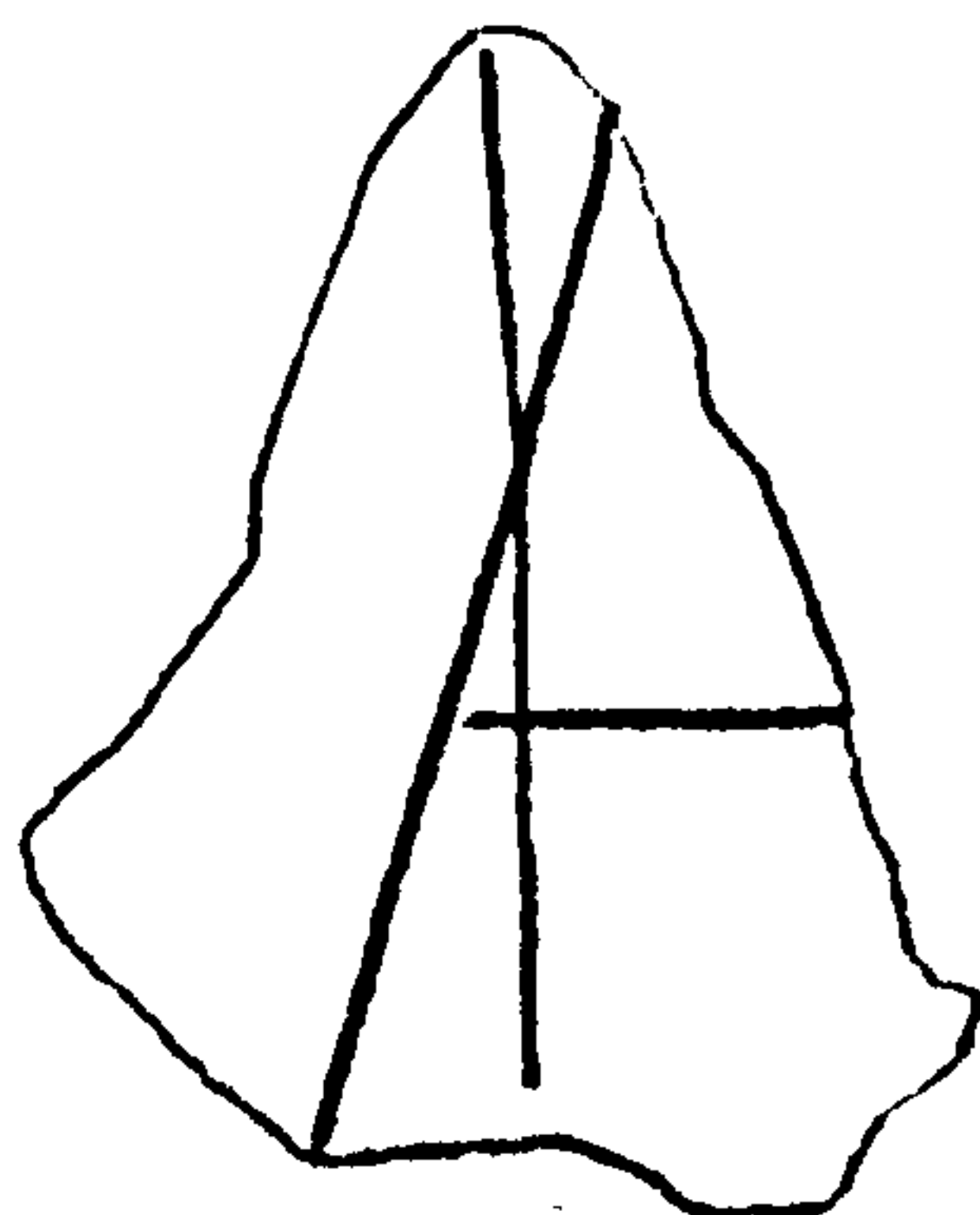


248

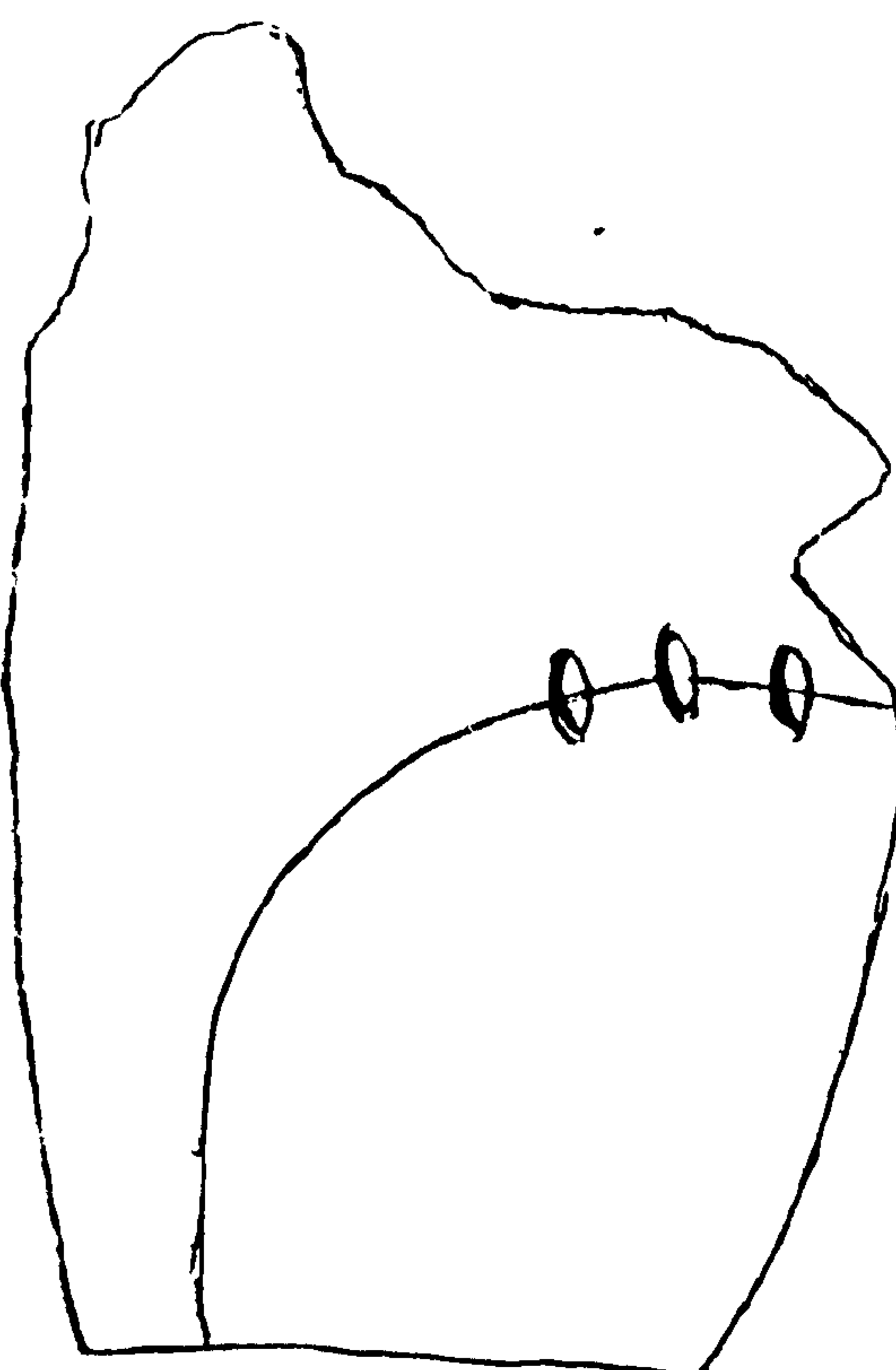
50. Phylakopi 1974-77 242-248. Scale 1:1, except 245, 1:2



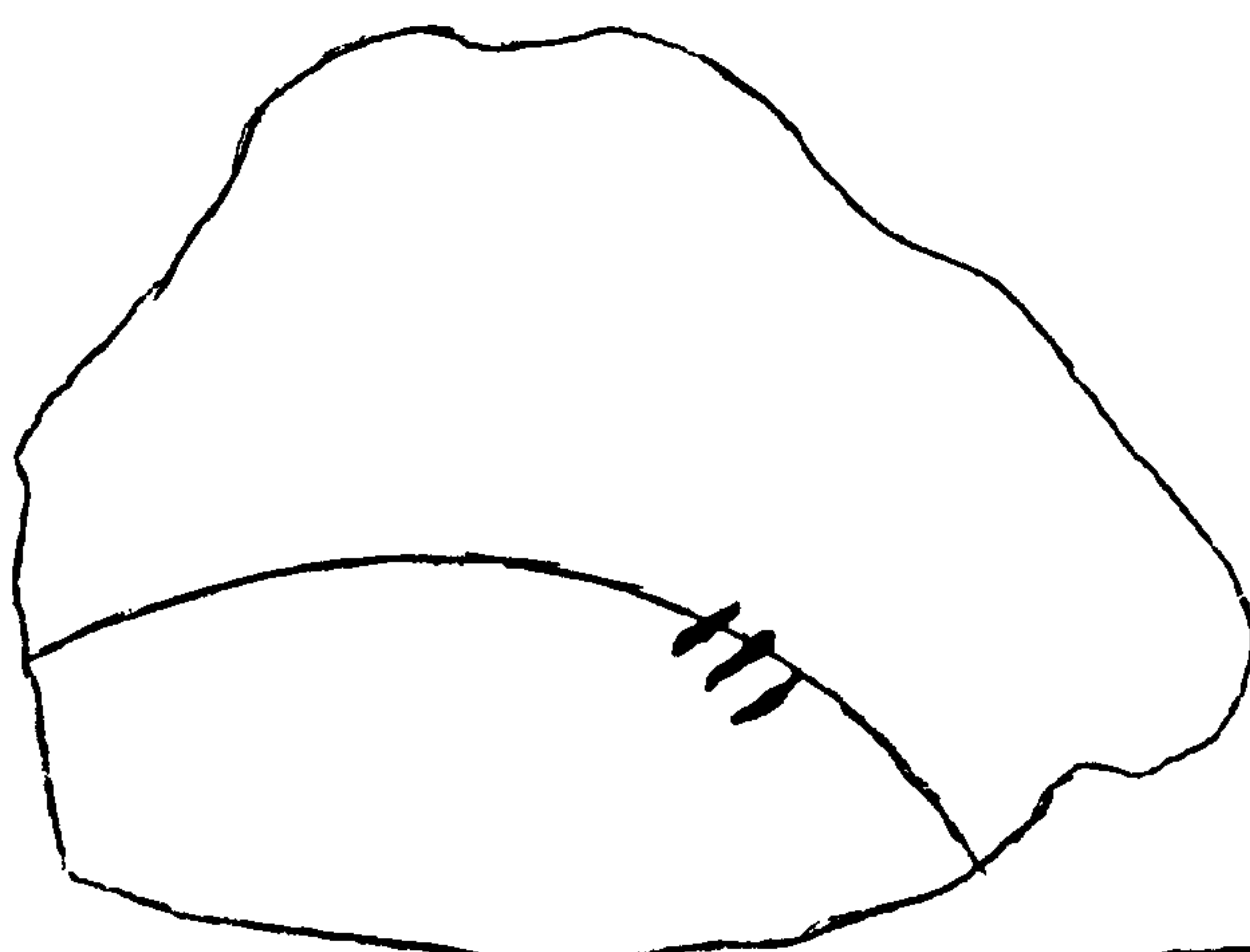
249



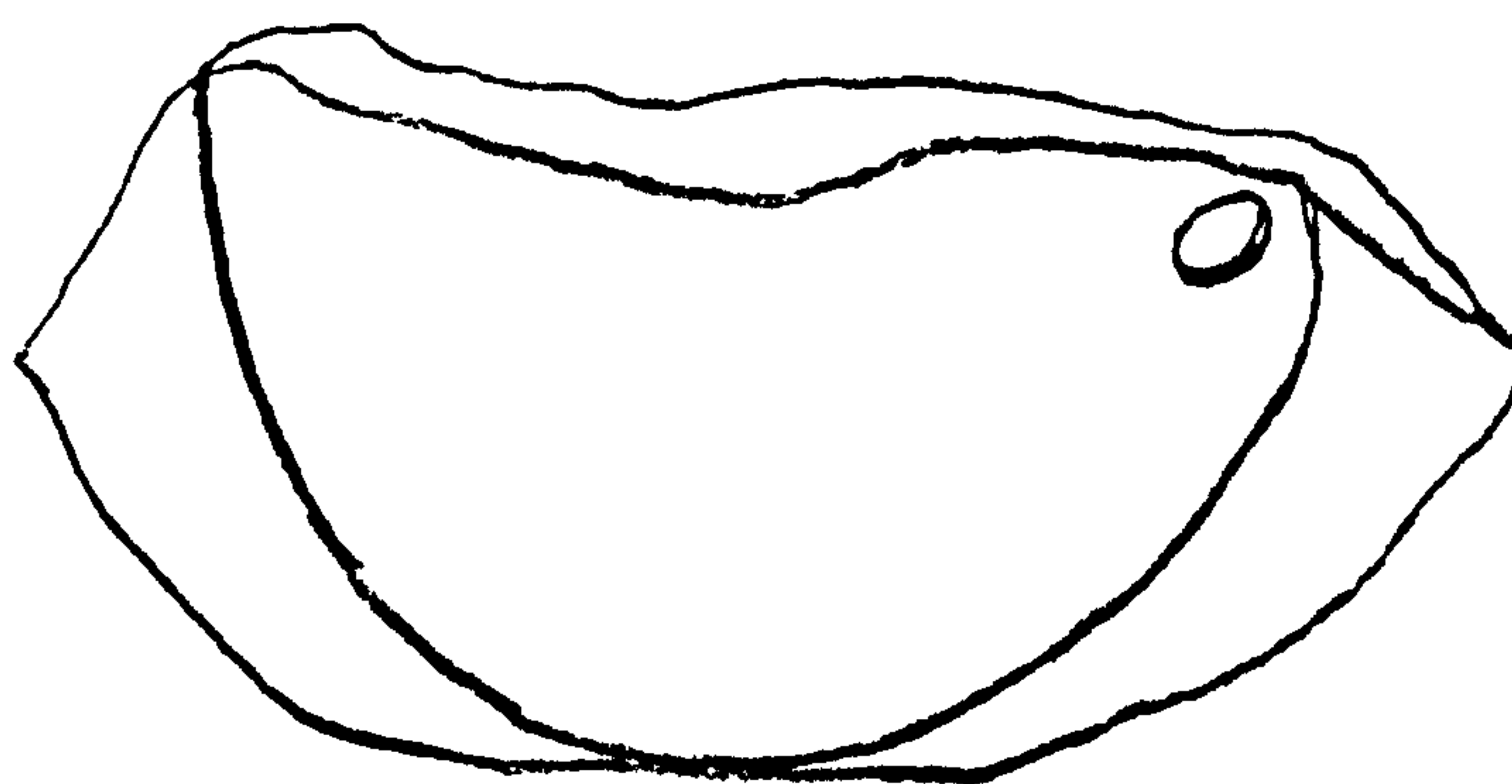
250



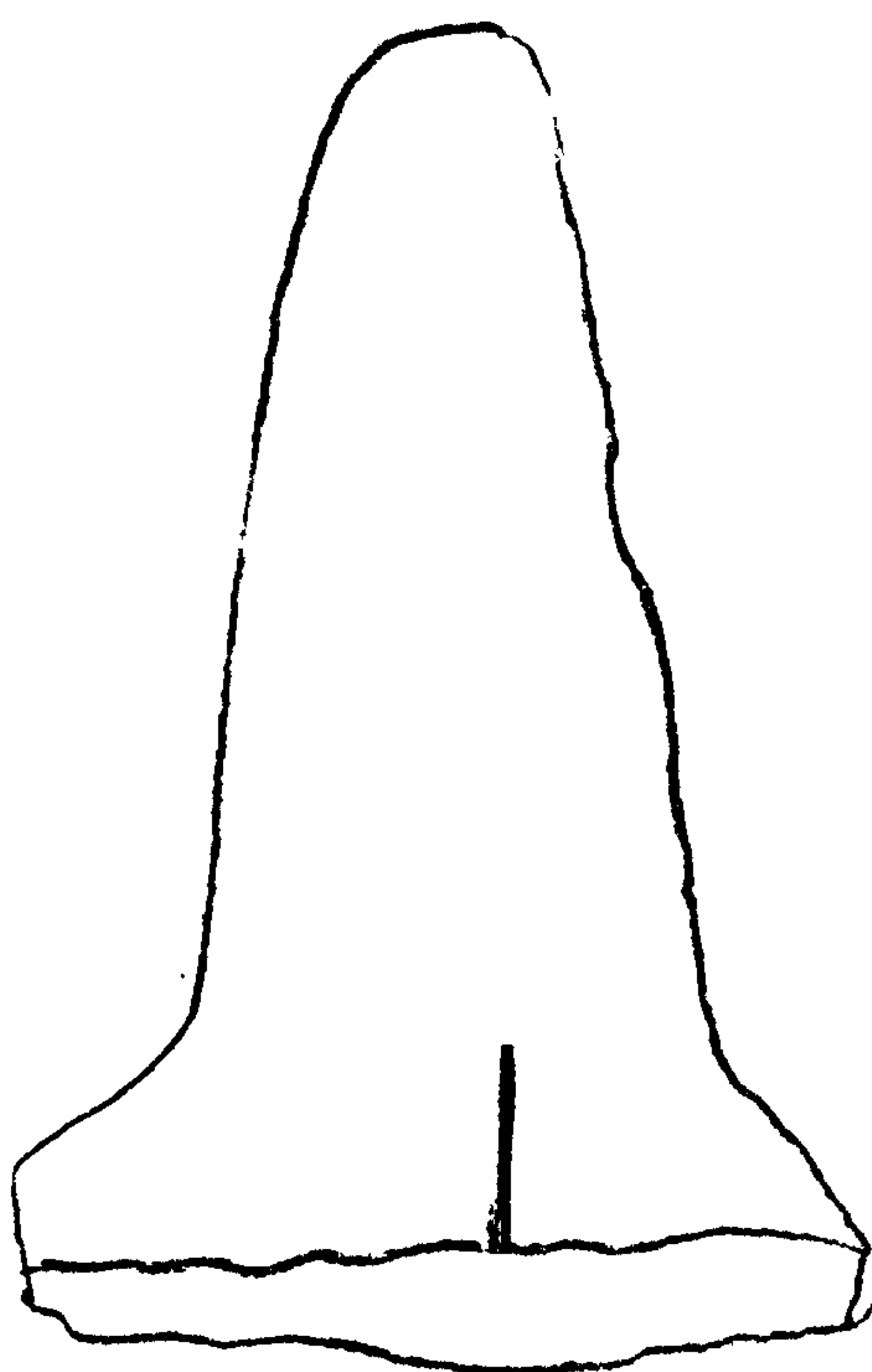
251



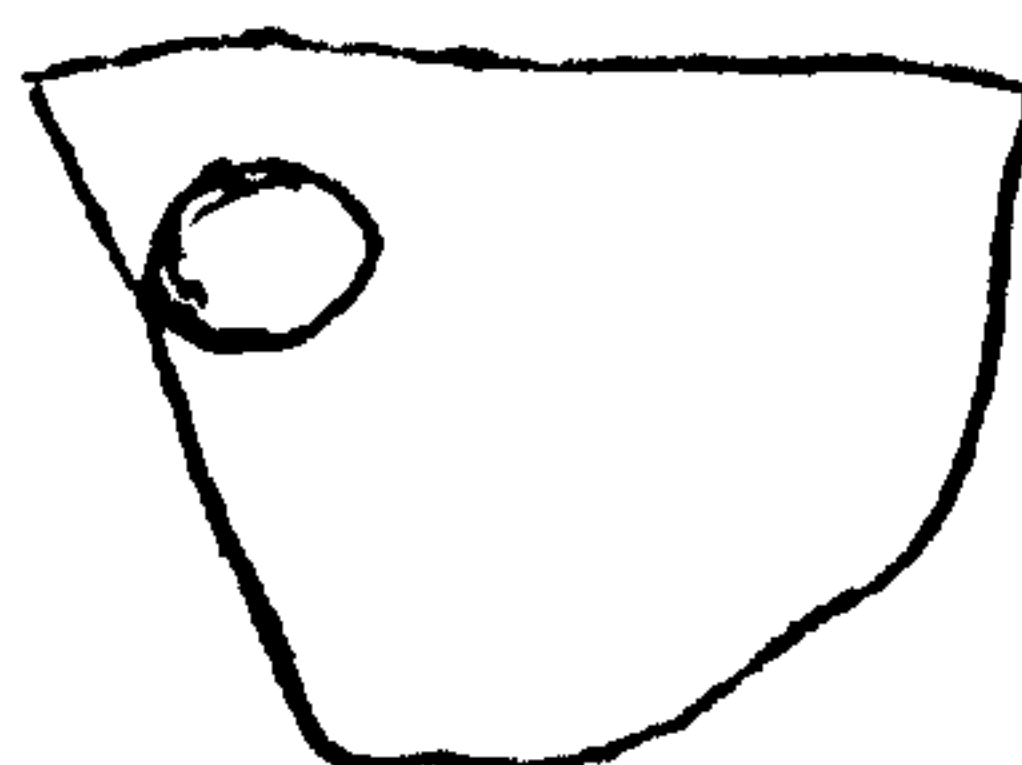
252



254

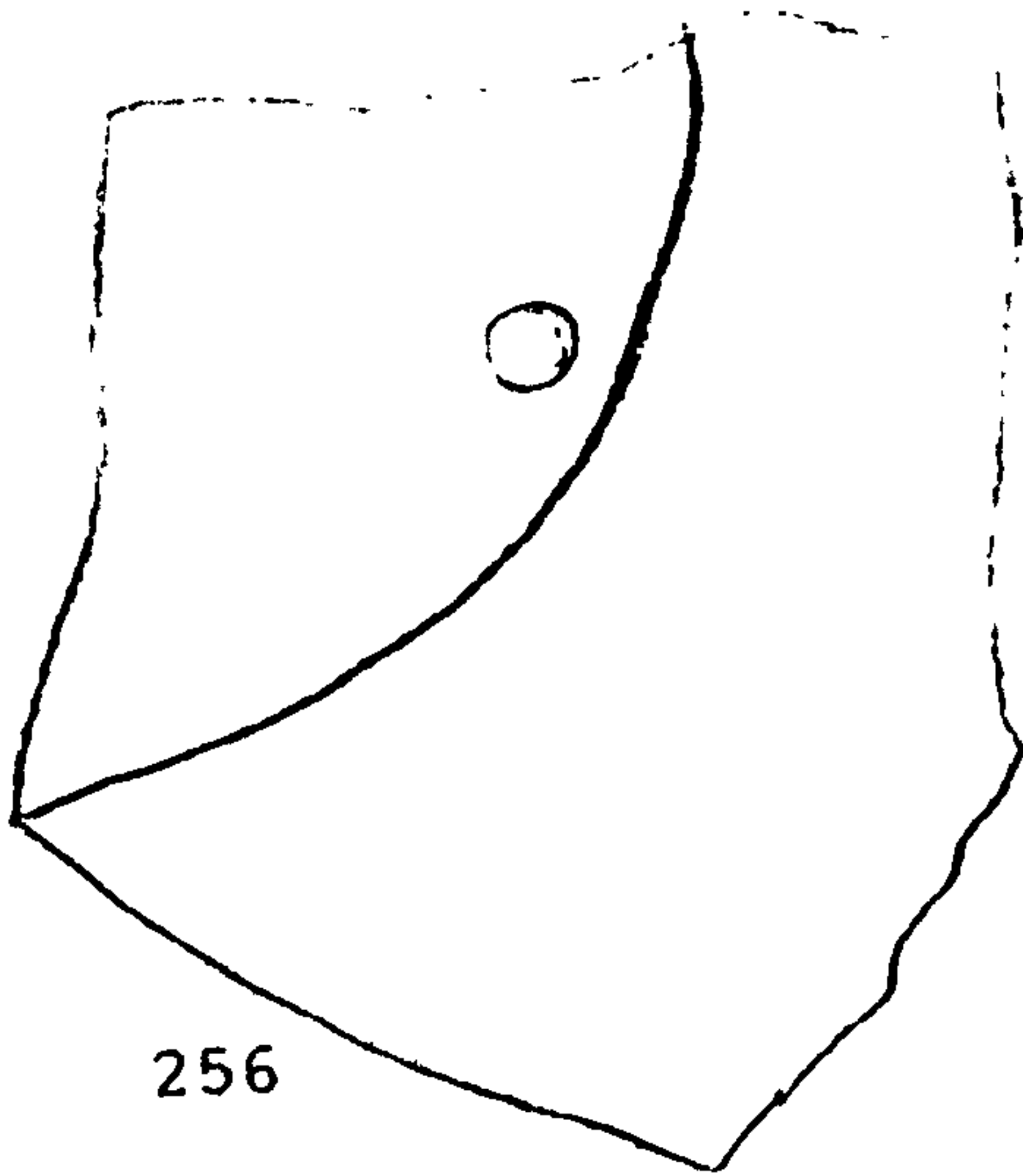


253

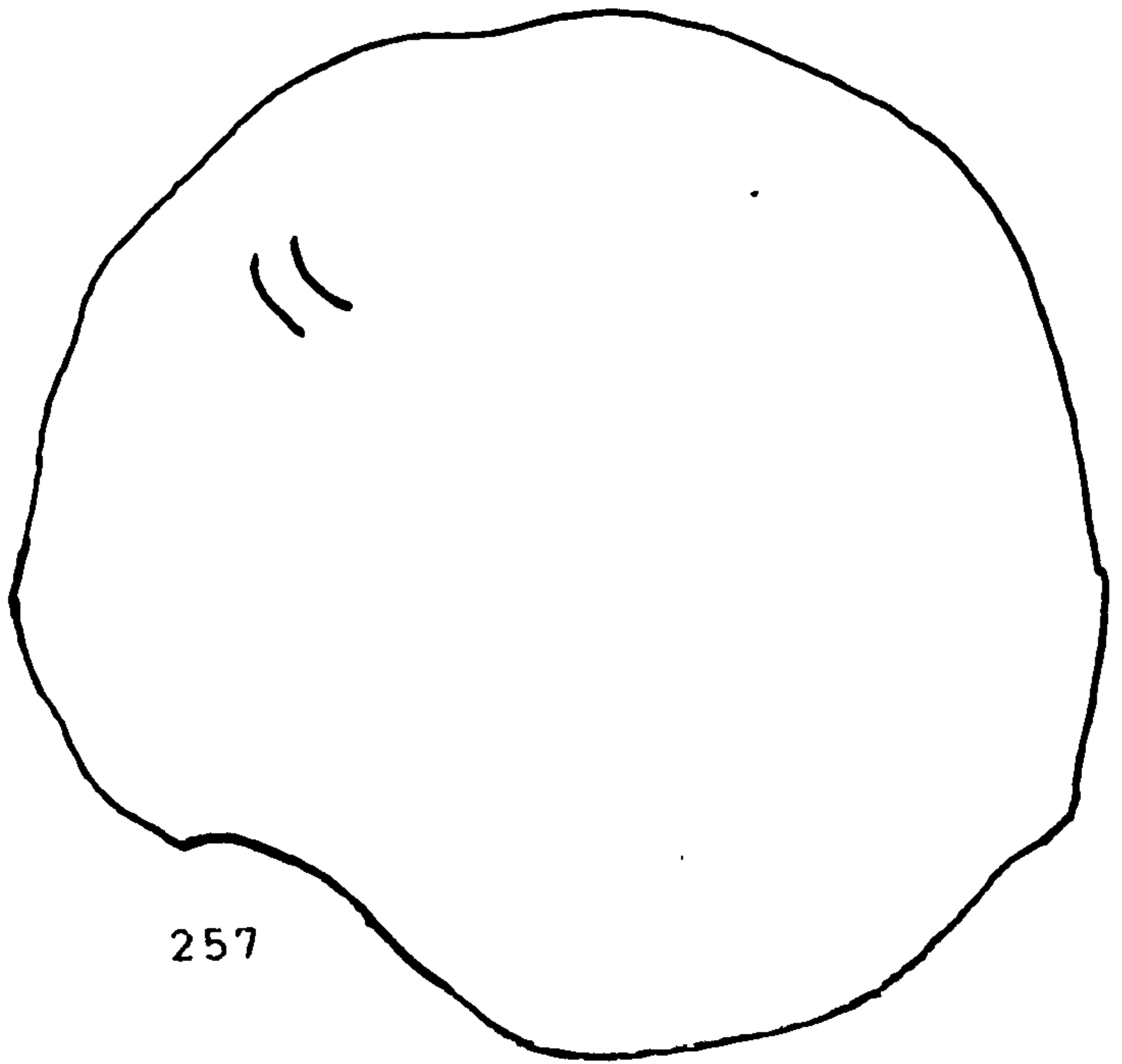


255

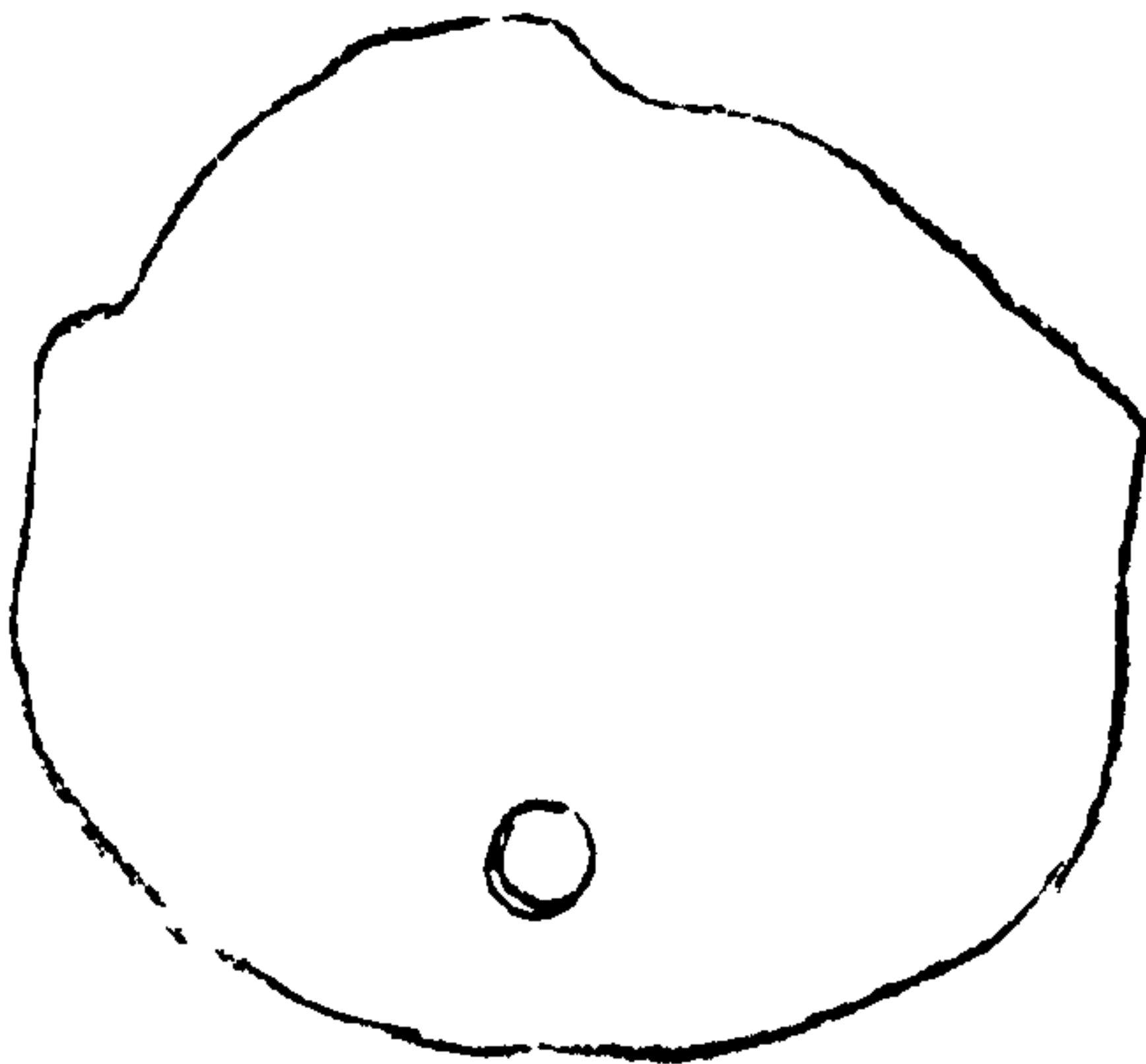
51. Phylakopi 1974-77 249-255. Scale 1:1



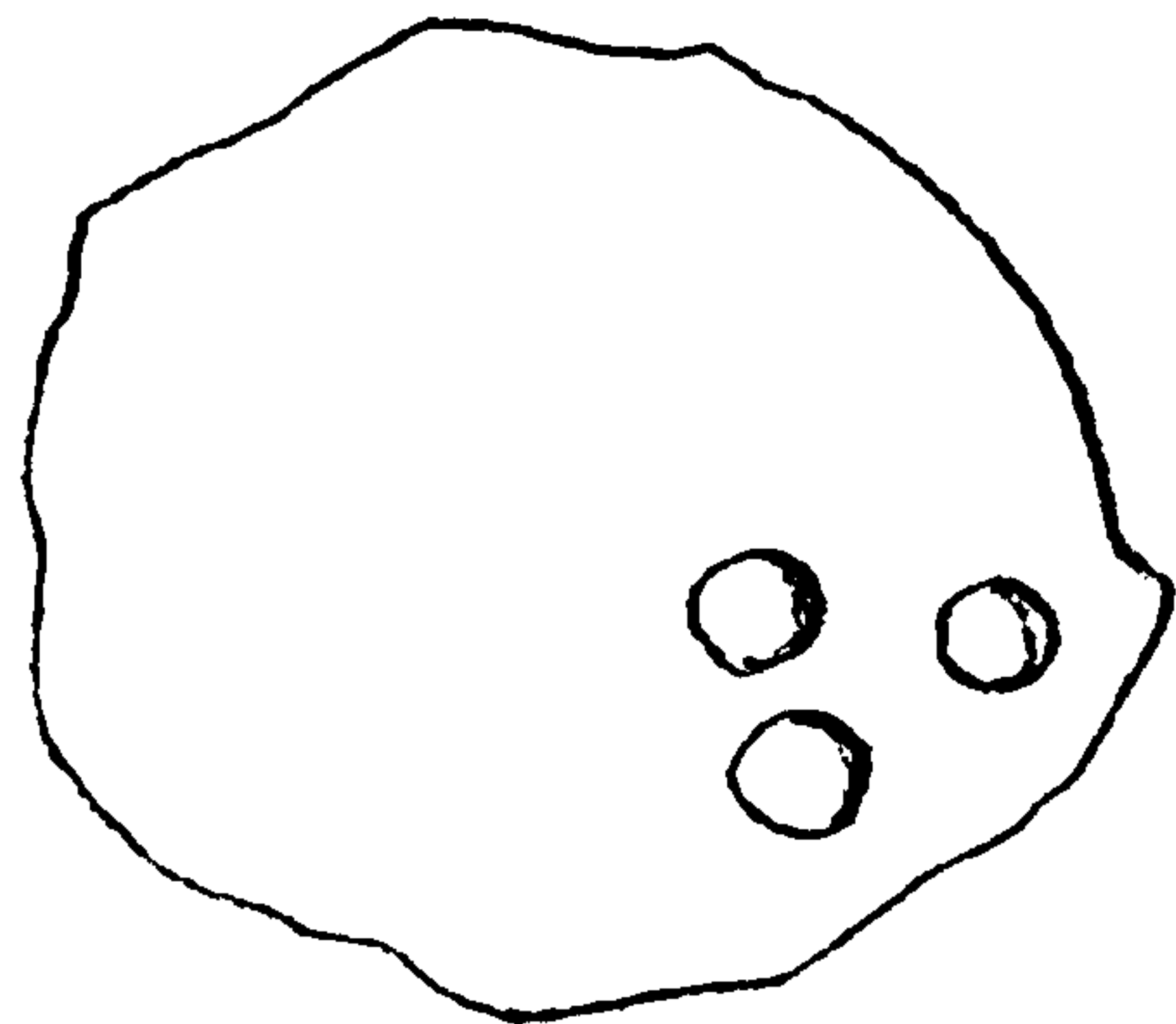
256



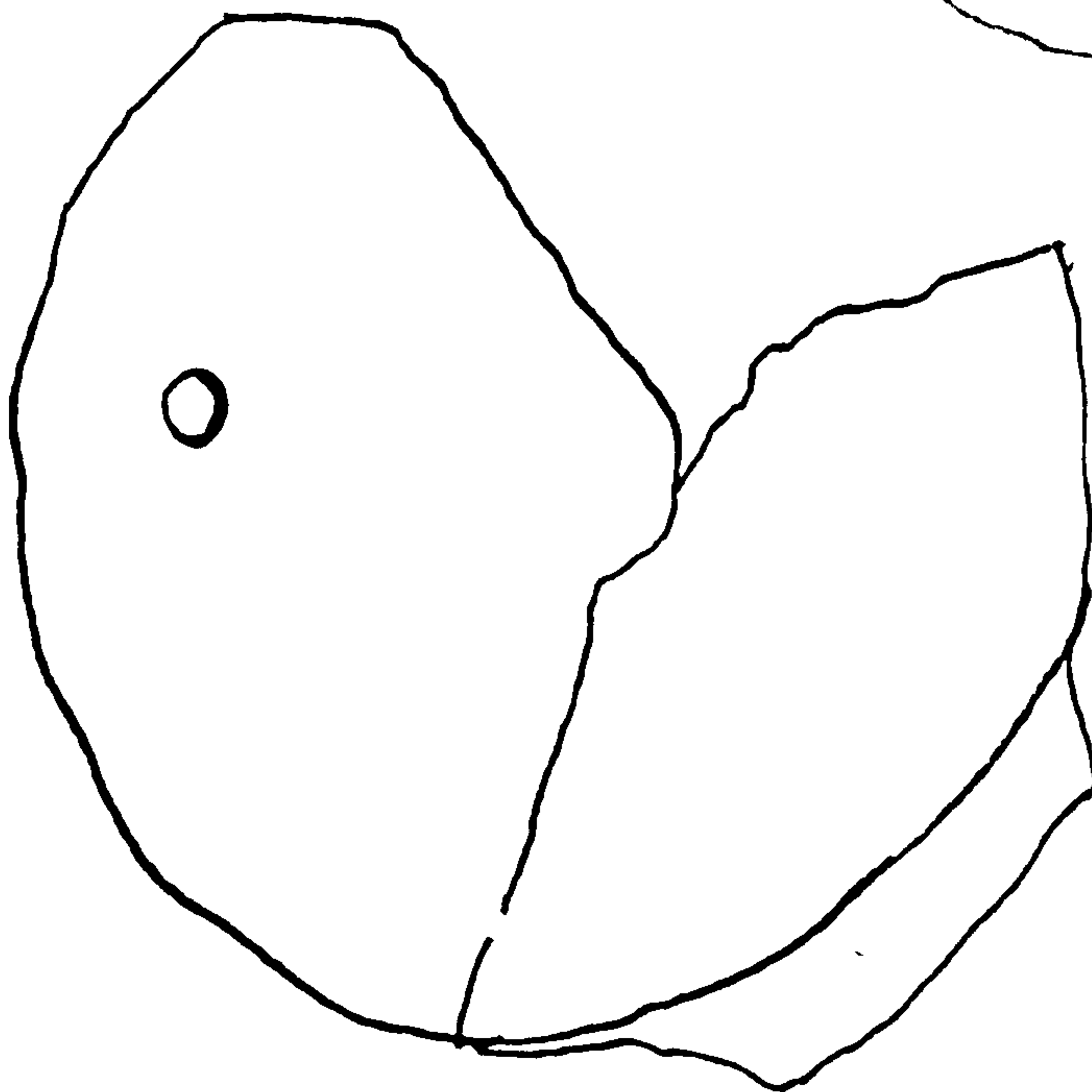
257



258

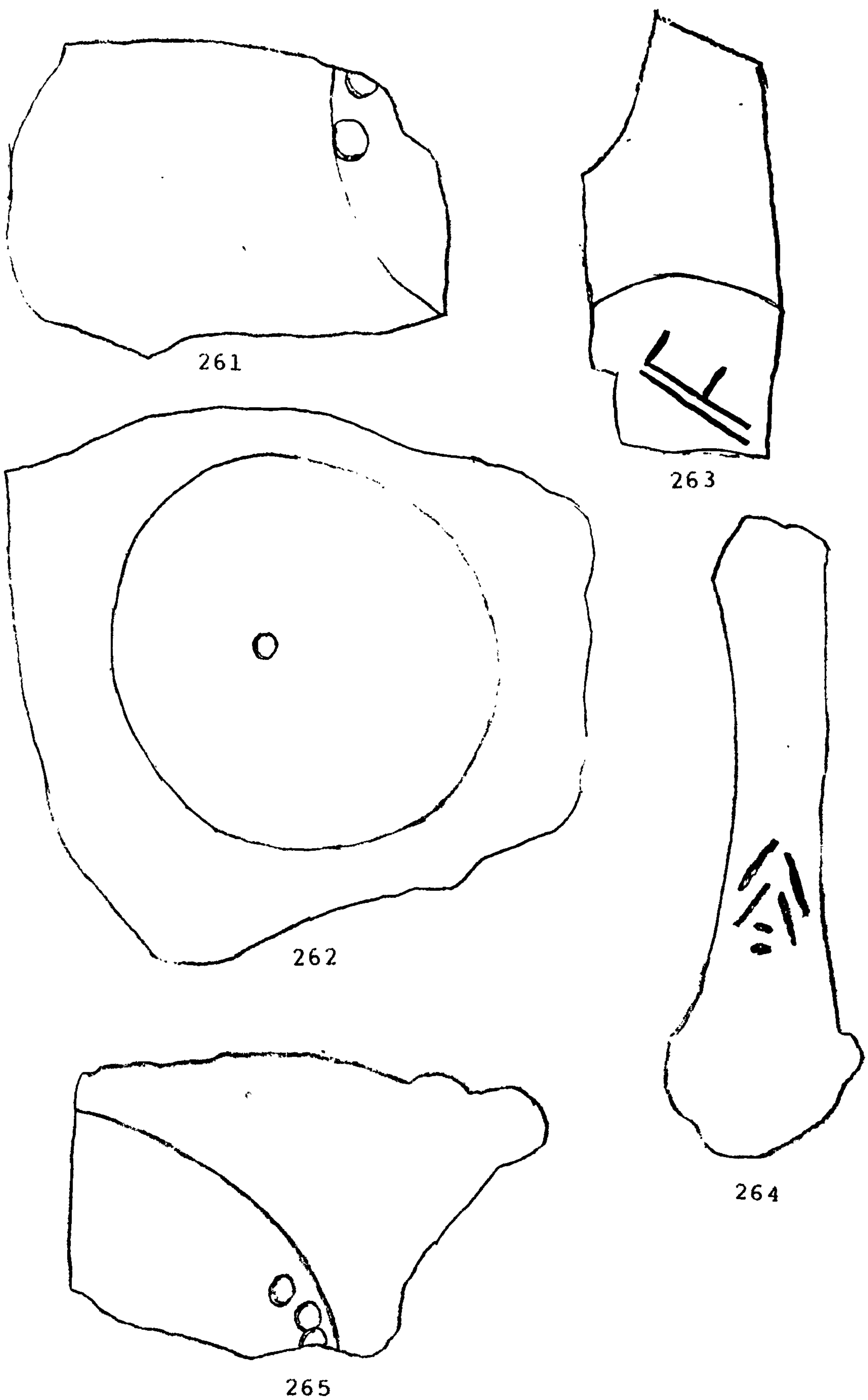


259

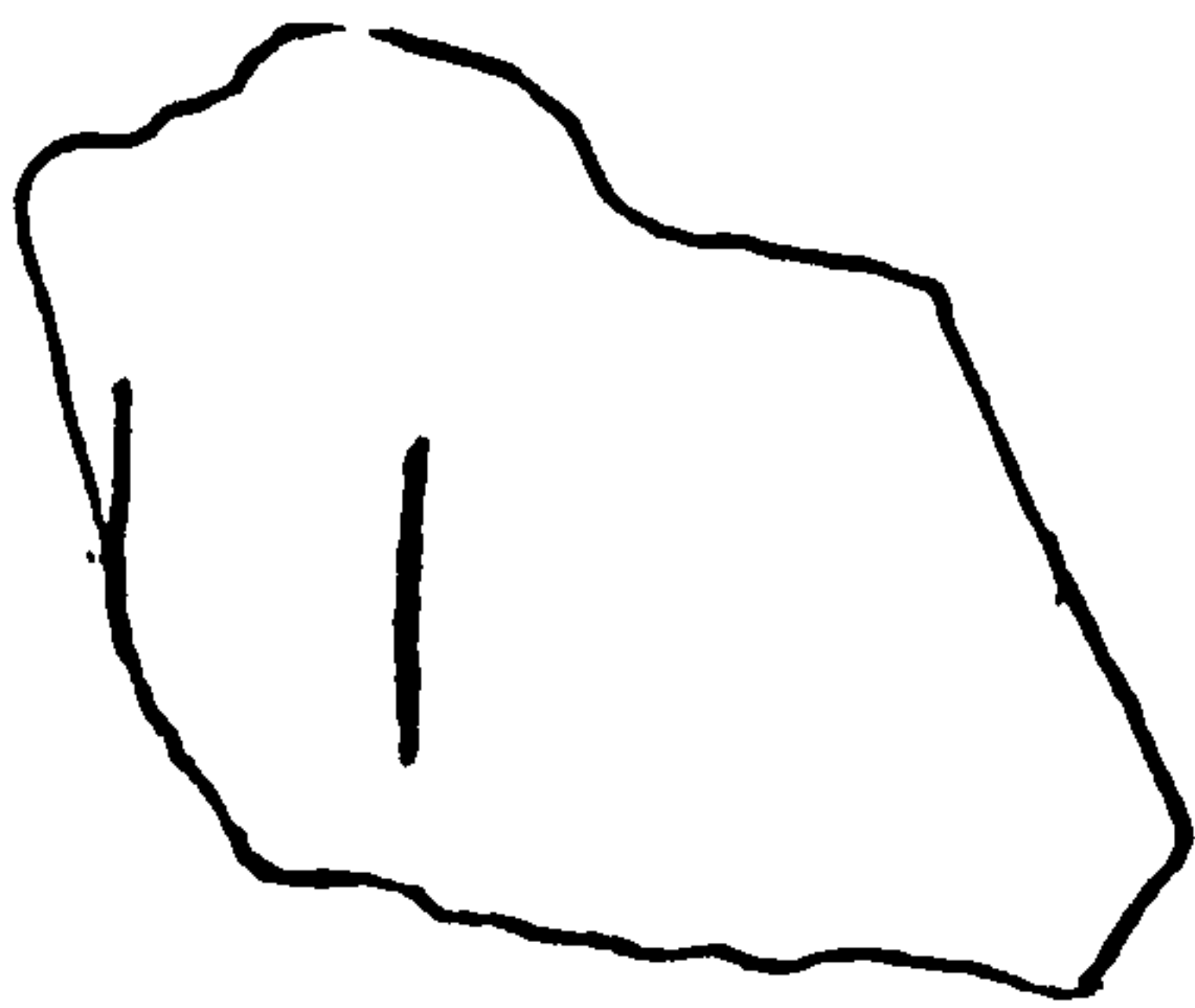


260

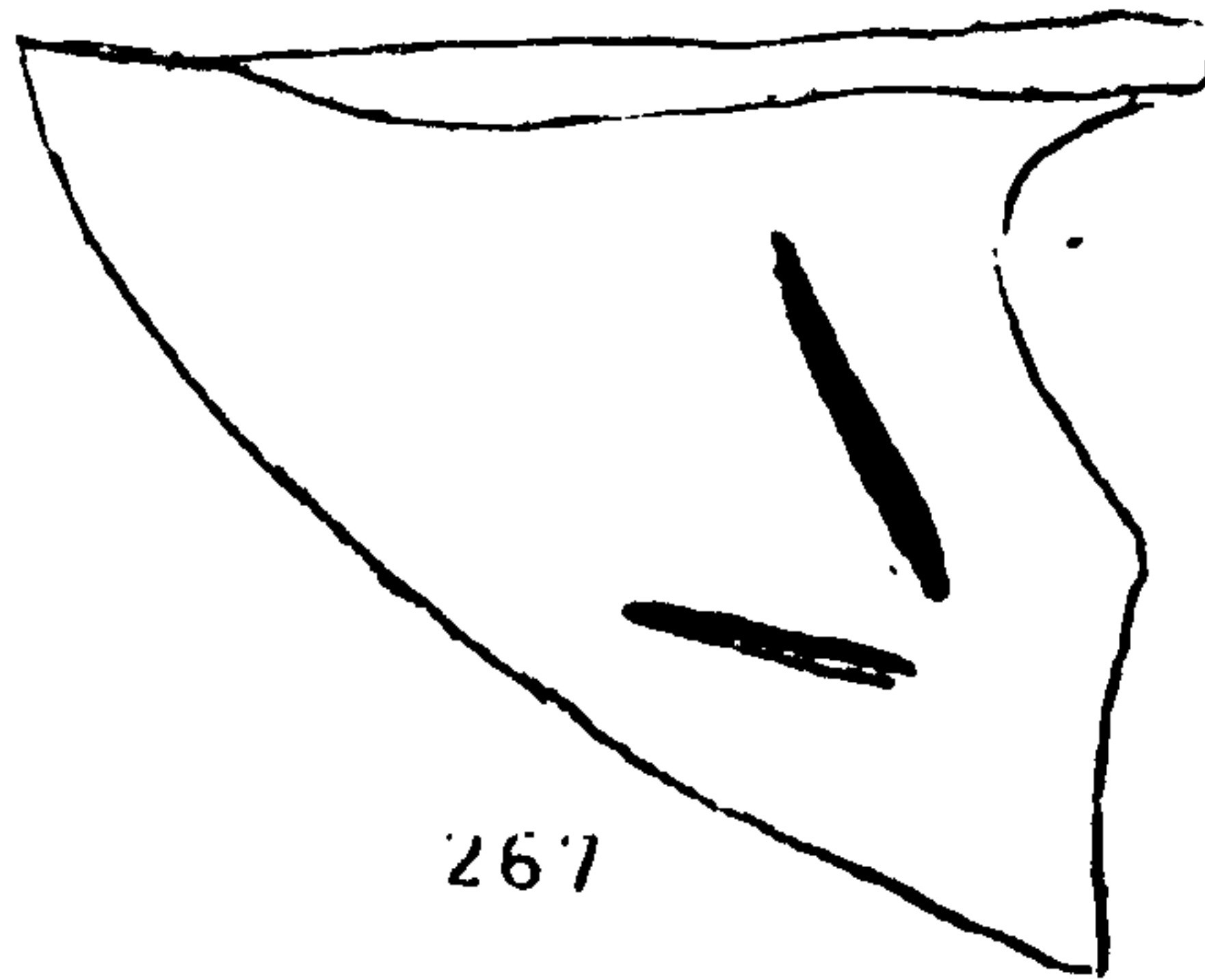
52. Phylakopi 1974-77 256-260. Scale 1:1



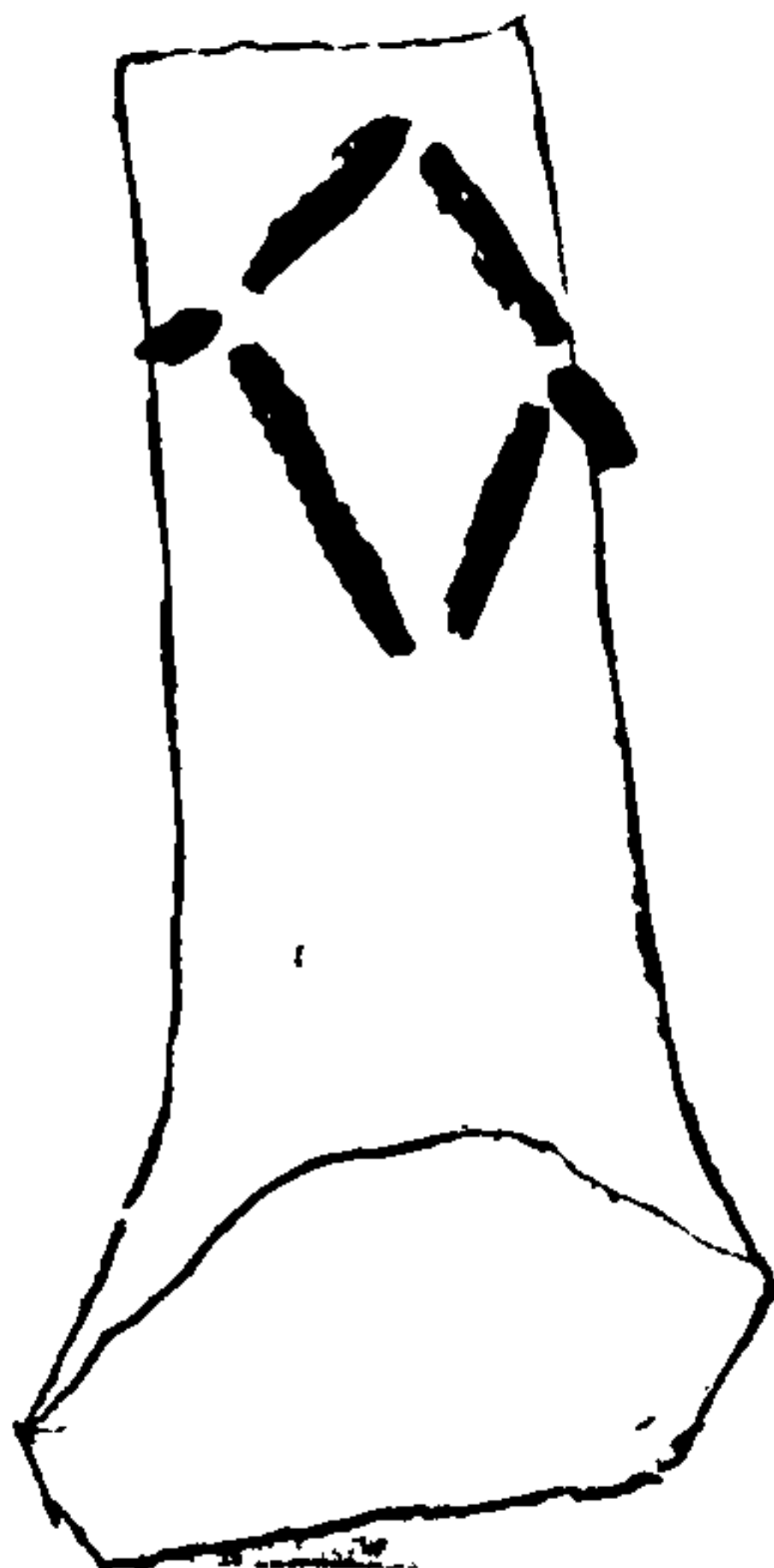
53. Phylakopi 1974-77 261-265. Scale 1:1



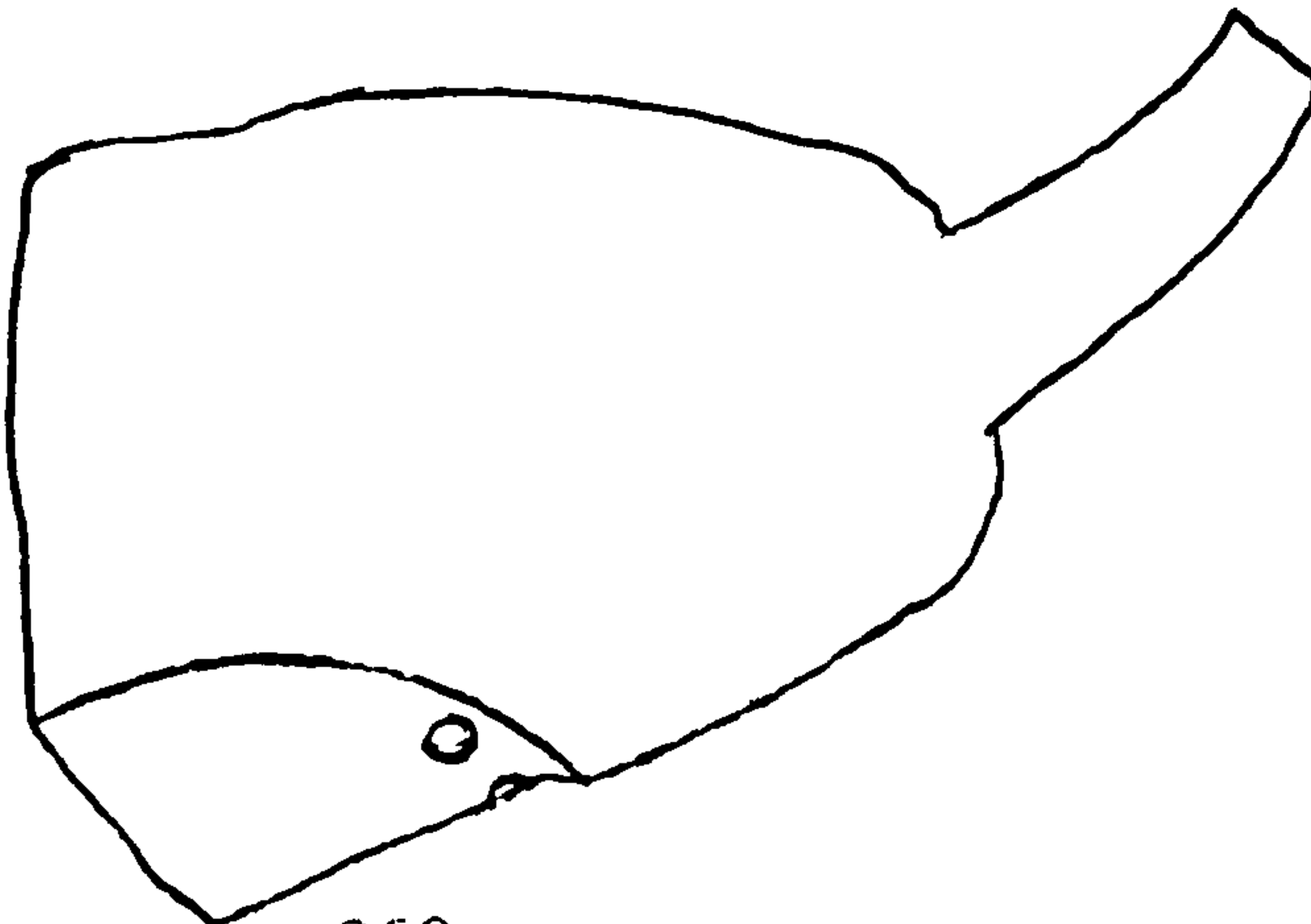
266



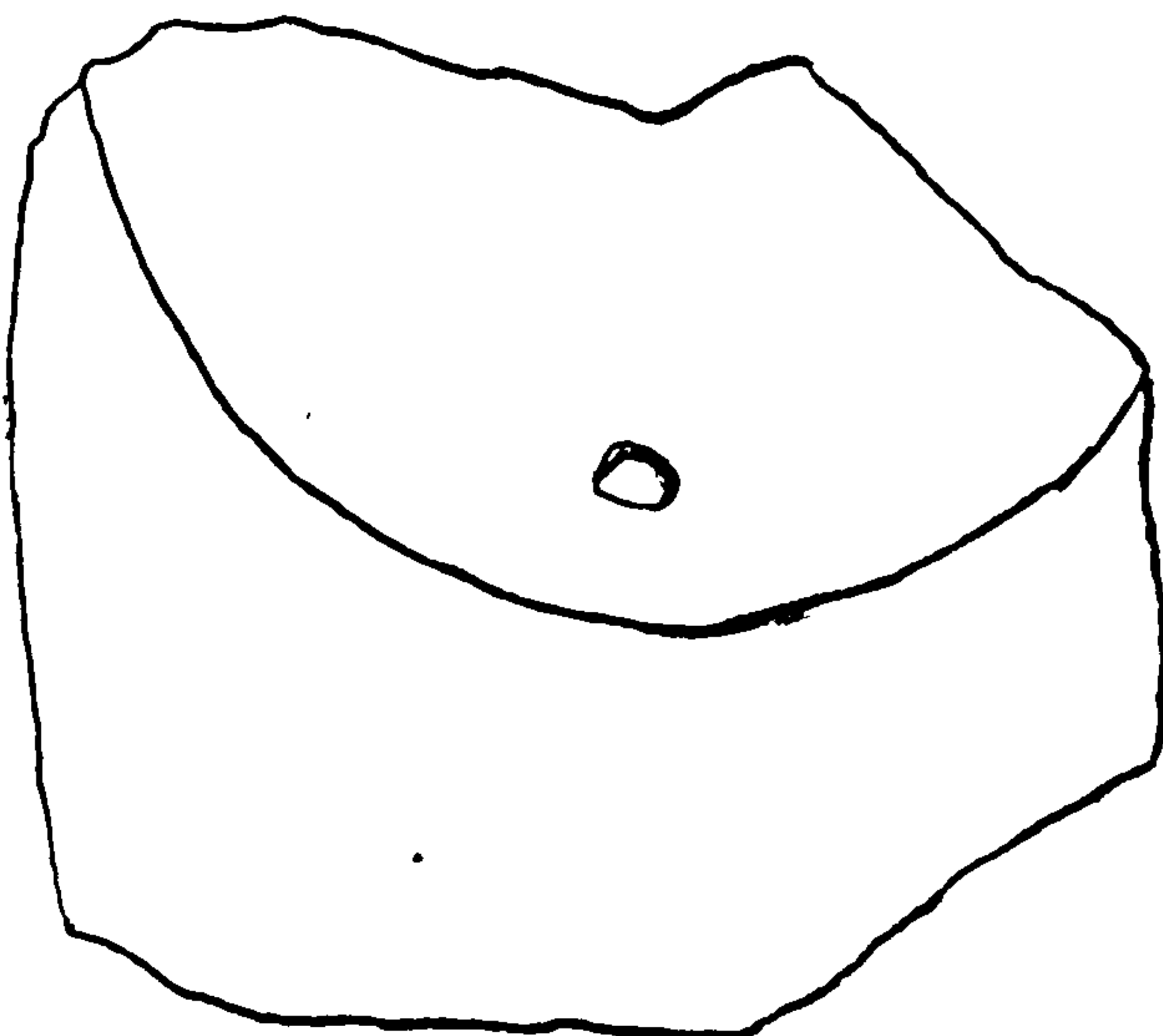
267



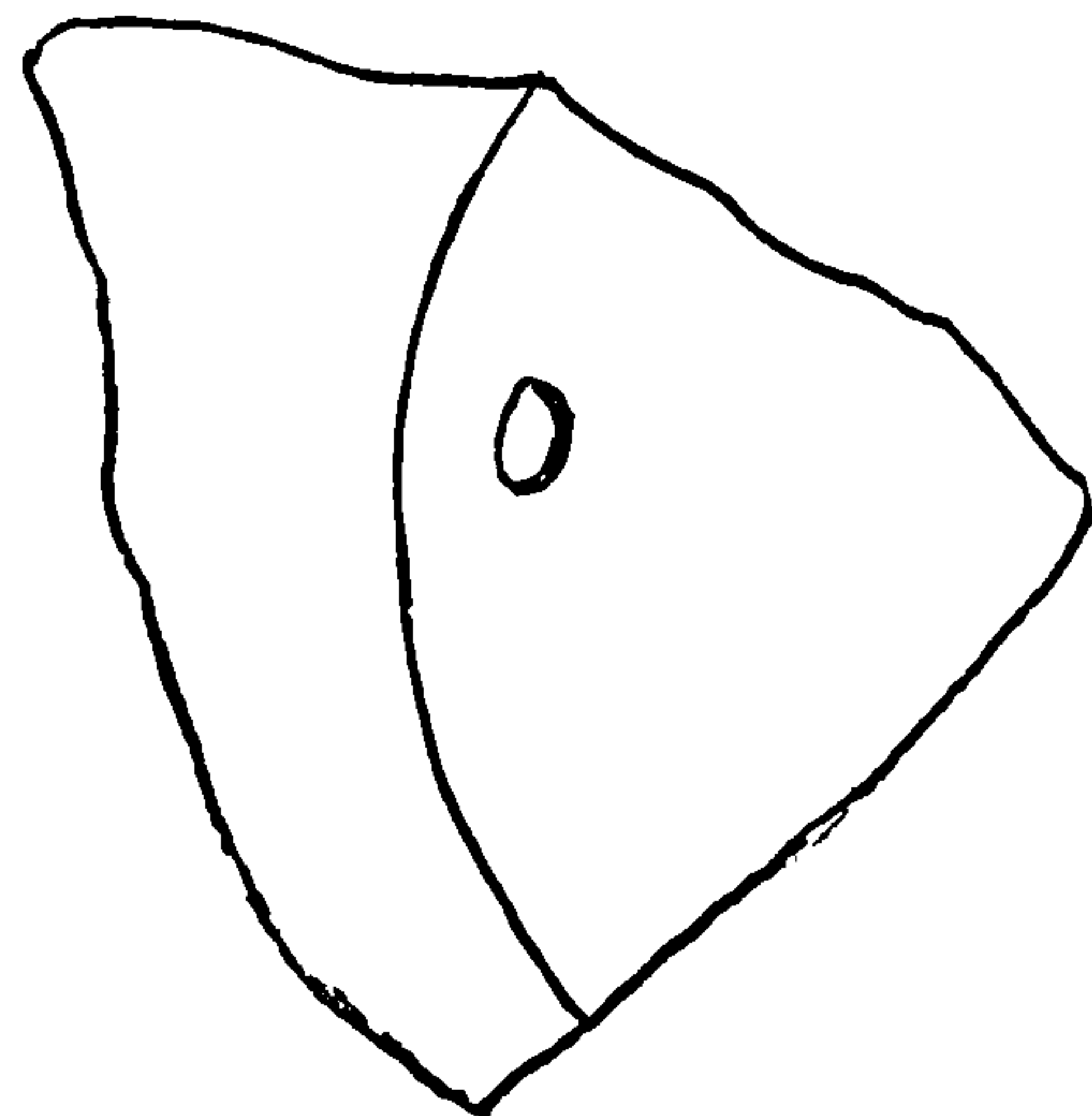
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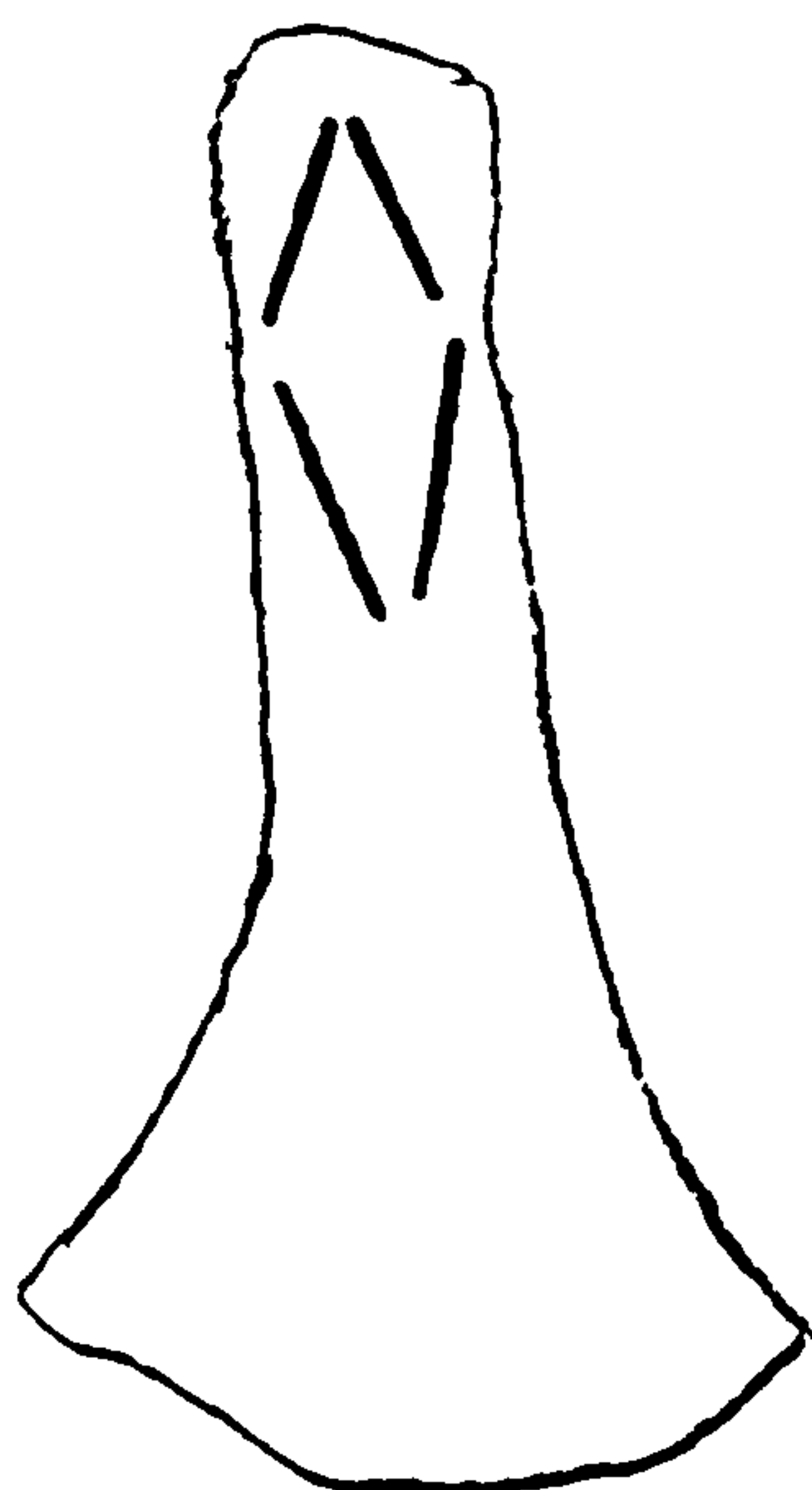


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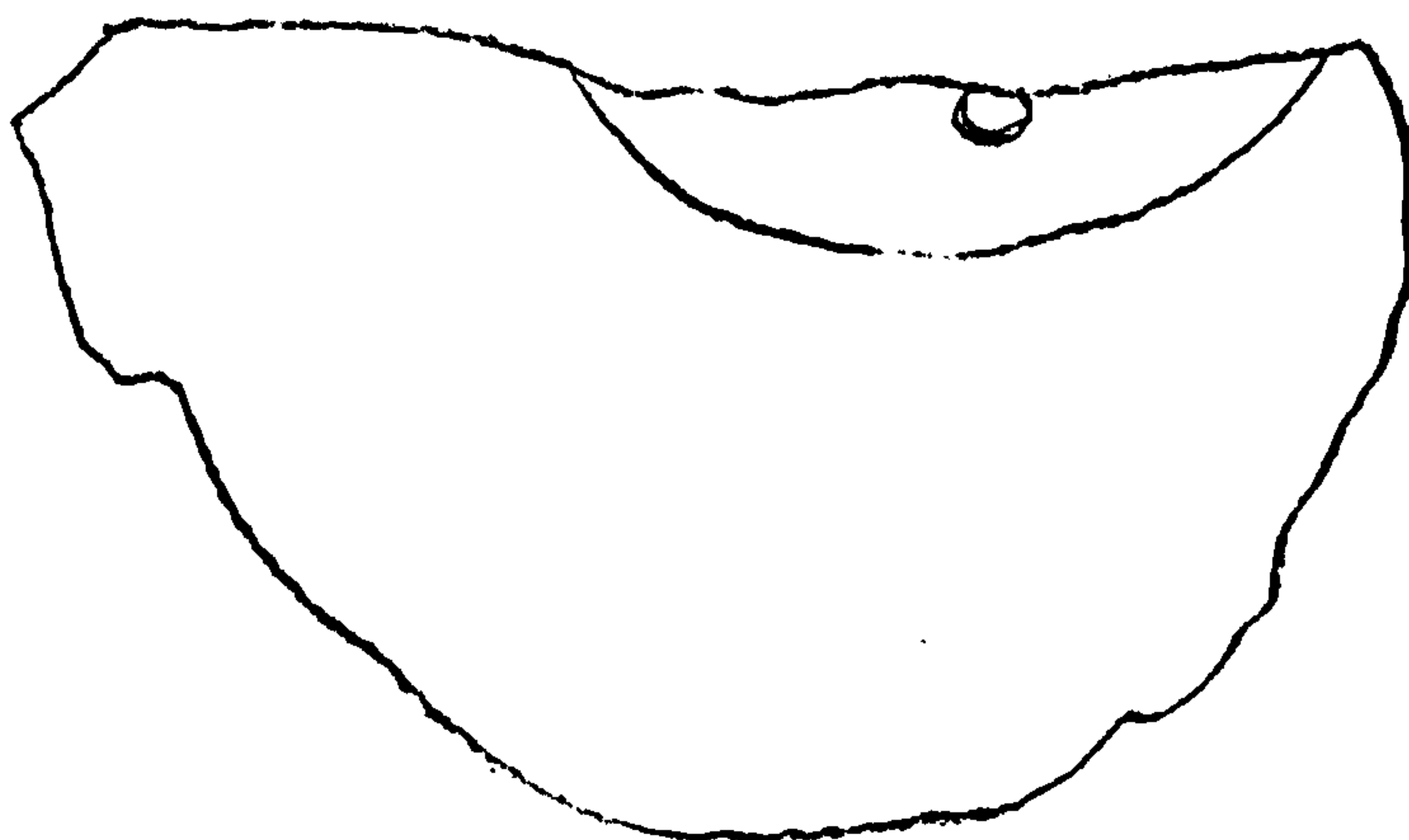
54. Phylakopi 1974-77 266-271. Scale 1:1



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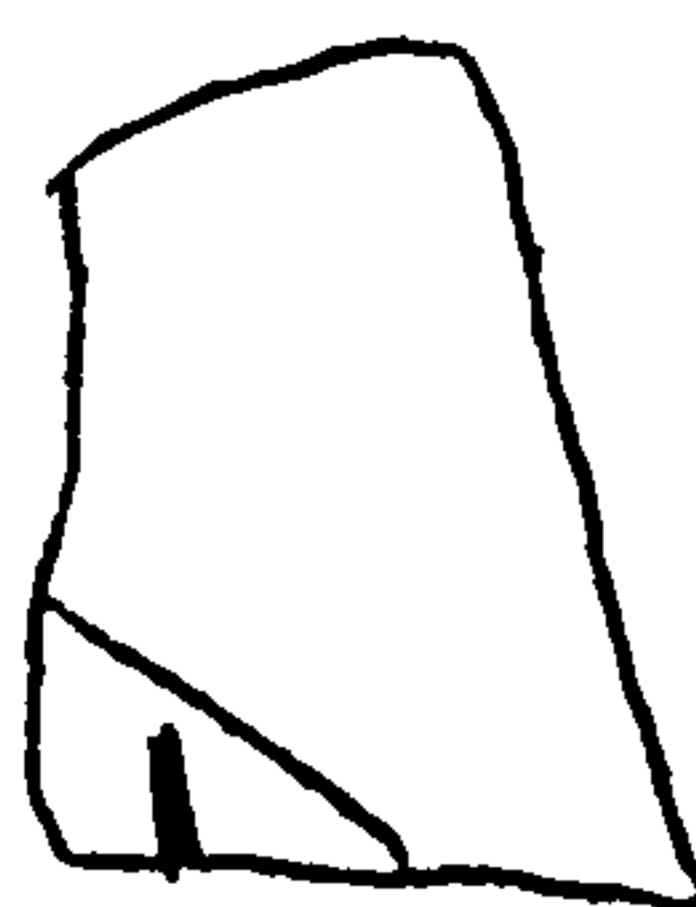
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55. Phylakopi 1974-77 272-276. Scale 1:1

SECTION IV: CYCLADIC MARKS (EXCLUDING PHYLAKOPI)

To discuss the potters' marks of the Cyclades excluding Phylakopi is to discuss the site of Ayia Irini on Kea almost exclusively, because no other Cycladic site has been so extensively published. Indeed, only a handful of marks from a handful of islands is available for comparison. It therefore seems sensible to consider these miscellaneous examples before going onto the more in-depth analysis of Ayia Irini.

From Mt. Kynthos on Delos comes a very homogeneous group of 14 marks. They are nearly all (79%) of ECII/IIIA date, with one of ECII and another of ECIIIA. All of them are open shapes. Bowls constitute 79%, all of ECII/IIIA date and all marked on the base, mostly (90%) with linear marks. The base is the most common location, 86%, for the marks, and 93% of marks are linear. Unfortunately there is no information available as to whether these pieces are imported or locally made, nor on the fabric, except that one vessel is of fine ware.

Marks have been published from four other islands : Naxos, Paros, Samos and Thera. From Naxos comes a Gray Minyan bowl of MC date, with a linear mark on the side. From Paros there are two jugs of ?MC date, both with linear marks below the handle. Samos has produced three handles of EC/MC date with linear marks. All three appear to be imports. Finally, two vessels from Thera have marks: a matt painted pot with a pictorial mark on the rim, appar-

ently of local manufacture, and a coarse ware, narrow bottomed open vessel with a linear mark on the side.

This rather unenlightening survey seems to indicate that the potters' marks of the Cyclades tended to be linear, on open vessels and used during the EC/MC periods. Undoubtedly further work will tend to enhance this meagre picture.

No such problem exists for Ayia Irini. Over 200 marks have been published, most in Keos IV Ayia Irini: The Potters Marks by Alikí Bikakí (Bikakí 1984) and the rest in Keos VII Ayia Irini: Period IV. the Stratigraphy and the Find Deposits. (Overbeck 1989). It is in fact Bikakí's classification of different mark types which is used throughout this study. (See figures 56 and 57 for examples of marks from Ayia Irini.)

Of the Ayia Irini marks, 43% are on open vessels. Their dates range from EC (only one example) through LCmid, with the concentration (22%) on MC. All different types of marks were used on open vessels, but the most common were oval/round impressions (34%) and linear (22%). A further 21% were fingernail impressions of various types (see below p.154). Open vessels were marked most often on the base or foot (54%) or on the side (27%).

Another one-quarter of the Ayia Irini marks occur on closed vessels. These cover a slightly later date range than the open examples, MC early to LH late, and 40% are

from LH mid. The marks are most often linear (30%), with oval/round representing only 18%. The base is once again the most common location (47%), followed by the side (30%).

Over 50 types of vessel were marked, plus pieces such as body sherds and bases which could not be identified as belonging to any particular shape. The only single shape to have a good sized group is the goblet, which represented 7% of the total. If we include specialised examples such as short stemmed or shallow goblet, this increases to 11%. They are mostly MC (29%; for plain goblets this increases to 38%), though the dates range from MC to LH mid. The most common types of marks are oval/round impressions (46%) and fingernail marks (42%). For all goblets the most common mark location is the side or bowl (58%), but among plain goblets the side is marked only 50% of the time, while a further 44% of marks are found inside the stem.

Seven different types of cup were marked. In total they represent 11% of the marked pieces. The dates range from MC to LH late, with concentration on LH early (25%) and LH mid (29%). The most common types of mark are linear (33%) and oval/round impressions (25%). Three quarters of cups are marked on the base.

Panelled cups form a relatively large group within this category (eight, or 4% of all marked pieces). Their dates range from MC mid-late to LH early, concentrated on MC

late and LH early (35% each). They most often have oval/round marks (63%) and like other cups, three quarters are marked on the base.

Among the generic category "cup", LHmid is the most common date (57%), and linear marks are in the majority (43%), though it should be noted that all the linear marks are different. None have oval/round marks. All are marked on the base. They are of different fabrics, including Dark Burnished and fine ware.

Various bowls make up another 11% of the Ayia Irini marked pieces. They are mostly MC (33%) and MClate (21%), but range from MC to LH mid. 43% have oval/round marks, and another 33% have fingernail marks. Most (71%) are marked on the base or foot. Within this category are several small groups. The generic "bowls" (five) are evenly distributed from MC mid-late to LH mid, and have various marks, though not fingernail impressions. 80% are marked on the base. Cycladic bowls (five) are mostly MC late (60%), the remainder are LH early. They are all marked on the base with oval/round impressions. Finally, deep bowls (six) are all of MC date. They are almost exclusively marked with fingernail impressions, and all marks are under the foot.

Another small group is the jars (5% of the total). They range in date from MC early-mid to LH late, but most (36%) are LH mid. The most common type of mark is linear (45%),

located on the base or side (45% each).

Many other vessel types are represented, from saucers to pithoi, but most have only a few examples, not enough to draw any conclusions from.

Just over one half of the marked pottery from Ayia Irini is of local origin (55%). The dates range from EC-LH late, but are concentrated on MC (28%) and LH mid (20%). 40% are open shapes, including 16% goblets. Another 22% are closed. Oval/round impressions are most common (24%), followed by linear (20%). 44% are marked on the base or foot, 32% on the side.

37% of the pieces were imported. These seem to start later than the local marks, ranging in date from MC to LH late, and concentrated on LH mid (41%). 26% are LH early. 41% are on open vessels, 36% on closed. Almost one third of the marks are linear, and one quarter are oval/round impressions. No imported pieces bear fingernail impressions. 69% of these pieces are marked on the base.

Over all, the base is the favoured mark location (50%). It is used from MC through LH late, though one third are LH mid. Every type of mark is represented, though linear marks are most common (30%), followed by oval/round impressions (21%). 47% of vessels marked on the base are open, another 25% are closed.

23% of Ayia Irini marks occur on the side of the vessel.

They range from EC to LH late, but are most common in the latter (25%). Again, all types of mark appear with the exception of fingernail impressions. 39% of marks on the side are oval/round impressions, and 43% are on open vessels.

A small (3%) but interesting group of marks are those placed inside the stem, usually of goblets. These are always fingernail marks, on open vessels. 86% are of MC date.

Two types of mark predominate at Ayia Irini. Oval/round impressions make up 25% of the total, ranging in date from MC through LH mid. The largest number are found in MC mid (21%) with 18% in LH early. Interestingly, goblets form 21% of the total number of oval/round marks. They are most often found on the base (45%) and side (41%). Various combinations of marks were used but the most common were 2 impressions (39%) and then one (23%).

Linear marks were also used quite often (24%). They cover a wider range of dates, from EC through LH late, but most are LH mid (55%), with a further 20% LH early. 17% of linear marks are on cups. Most are on the base (59%). Some 30% of linear marks are on fine ware, with the rest divided among various different fabrics. There are quite a few different linear marks used, including one or more lines, but the largest group (17%) is the cross.

Fingernail marks make up 12% of the total. 25% are on goblets, another 18% on deep bowls. Nearly all are found on Dark Burnished ware (96%). They all date to the MC period. 68% are under the foot or on the base, while 36% are inside the stem.

Bikaki has divided the fingernail marks into three categories : a) the clay pulled from left to right; b) the clay pushed from right to left, leaving an oblong mark; and c) the nail pushed straight into the clay without dragging one way or the other (Bikaki 1984 p.8). These differences would seem to be fortuitous were it not for the fact that type C appears on quite different vessels of a different, generally finer fabric. It could be that the three types had different meanings, were applied by different hands or simply that the more brittle fabric on which the C marks appear required a more delicately applied mark.

Another small but unique group of marks are the punched dashes. They were used from MC mid to LH late, mostly in LH mid (64%). 50% were on closed vessels, 57% on fine ware. They were most often used on the base (57%). Several groupings were common : three punched marks with a fourth above (21%), a quincunx (14%), two on base and one on side (14%) or simply two together (14%. See also below p.159).

Most of the fabrics from Ayia Irini are described, rather than named (i.e. "hard, semi fine, brown" rather than "Cycladic White"), which makes it rather difficult to equate them with types from other sites. However, we can

examine some groups. Dark Burnished pieces make up 26% of the total. They bear all the different types of marks, but the largest groups are oval/round impressions (34%) and fingernail marks (41%, taking all three types of fingernail mark together). 48% are marked on the base or under the foot, most of the rest at various points on the side. Various types of goblets form 41% of the Dark Burnished group, with bowls another 17%. All date to MC/MH, spread fairly evenly except for a concentration of 21% in MCmid, which is to be expected with this fabric.

7% of the Ayia Irini marks are on coarse ware (compare with 4% from Phylakopi). Unlike Dark Burnished, most of the marks are linear (53%), but again they are most often located on the base (60%). The coarse ware marks tend to be later in date, with 67% being from LHmid, the rest spread over MH and LH.

A further 10% are semi-coarse. They are most often linear (26%) or cut (26%). Linear/pictorial are a further 22%). They are as usual located on the base and side (26% and 30% respectively). Where the vessel type can be determined, the most common are large closed vessels (22%) and pithoi (13%). Semi-coarse ware seems to be marked slightly earlier than true coarse, with 26% MH late and 30% LH mid.

Fine ware makes up 15% of the total. 36% of the marks are linear and a further 24% punched. 15% are oval/round impressions. Once again the base is the most common loca-

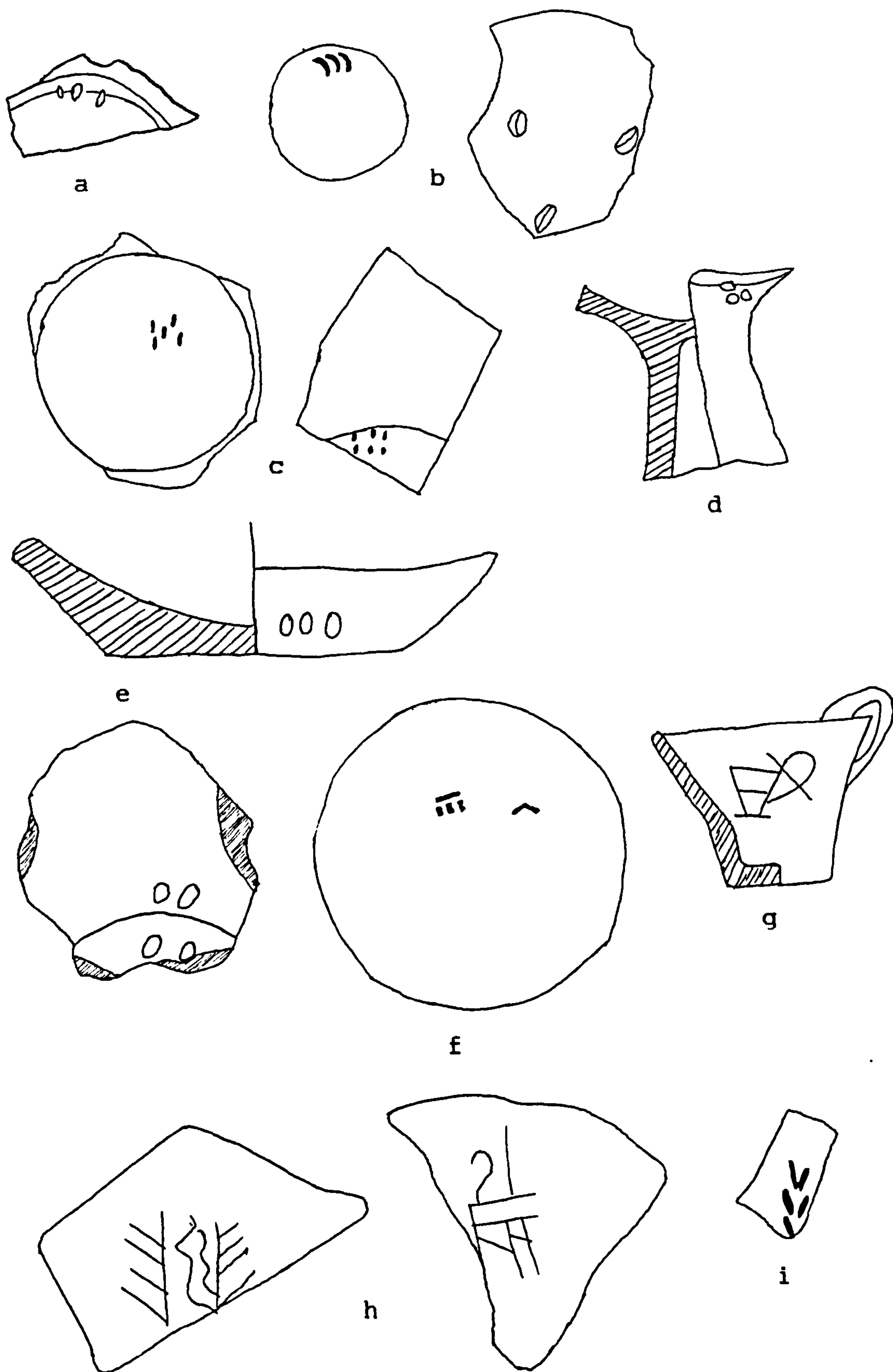
tion (63%). A number of shapes are represented, more often open than closed. The dates range from EC to LH late, but most are LH early (24%) and LH mid (51%).

Only 5% of the marked pieces are on semi-fine ware. Most bear linear/pictorial marks (45%). 36% are on the base and a further 36% on the side or neck. A miscellaneous group of vessel types have been found, with only one example of each. The dates cover a smaller range than normal: one is MC, the rest MH late (45%), LH early (27%) and LH mid (18%).

We can consider the history of potters' marks at Ayia Irini more closely because Bikaki dealt with them chronologically, by period. Statistically, the use of marks ranged from EC to LH late, with the greatest number in LH mid (26%). In this period, the most popular type of mark was linear (52%), and the most common location was the base (62%). Within Period IV, the early and middle parts of the MBA, oval/round marks were more common (34%), though linear were used (28%). About 40% were marked on the base, and a further 30% on the side. Periods II and III, covering the Early Bronze Age, produced only two marks (Bikaki 1984 p.5). This is in common with most sites, where there are relatively few marks from EBA contexts. However, in Period IV marking suddenly became much more important. Most of the marks are on local products, mostly burnished ware. The marks are on the base or side (ibid p.7). There seems to be no development during the period: all types are used throughout (ibid

p.10). Bikaki divides the mark types into four categories. 3, linear marks and 4, composites, are rare in this period, with only five and one examples respectively (ibid p.9). Category 2, oval/round impressions, is somewhat better represented. Seven of the examples are imports, and in fact this system of marks has been found on Melos and Aegina (ibid). The first category comprises 52 of the 90 marks for Period IV. Bikaki has collected several types of marks under the title "groups of dents". This includes fingernail impressions, cuts and stamped and incised marks. Most often they appear in groups of three. She suggests that the choice of mark type depended on the shape of the vessel: fingernail marks a and b, the most damaging to the fabric, for example, are found inside heavy stems where they were neither visible nor likely to affect the use of the vessel. Almost all of these groups of dents are on local products and few are known from other sites (ibid p.8).

The marking system changed radically in Period V, as did the types of vessels marked. As a whole the practice of marking became less prominent, with only 18 pieces found in period V contexts. Local marks are now on coarse and plain wares. Oval/round and composite marks continued, but mostly on imported Cycladic White or "pale ware". Linear marks, on the other hand, became much more common, on both local and imported pieces. They range from simple strokes to elaborate motifs from the Linear A repertoire. These more complex marks tend to be more conspicuously placed.



56. Potters' Marks from Ayia Irini

It should be noted that the first true Linear A inscriptions found at Ayia Irini are from period V, somewhat earlier than the tablet from Phylakopi I. Clearly Kea had fairly close connections with Crete, as well as the mainland and the other islands. (Bikaki 1984 p.22).

In Period VI, the early LBA, potters marks increase again, though now some two-thirds are on imported pieces. About one-half of these come from other Cycladic islands--usually marked with oval/round impressions on the base--and a few from Aegina and the mainland, with linear marks.. Two are marked on the handle, the rest on the base. Two have an "E" like sign which could be from Linear A or B, and recurs in Period VII as well as outside Kea (ibid p.26).

The use of marks continued to increase in Period VII--though the number of marks (58) is very small compared to the amount of pottery recovered. The local marks continue on plain or coarse ware, and seem to be used 1) on large storage vessels , usually elaborate linear "labels" and 2) on coarse, usually open vessels--jars, deep bowls or large cups--with more simple signs.

The imports all seem to be from the Mainland. Four fabrics have been identified, two of which bear the new "punched" type of mark. Six of the punched marks appear on the same fabric, and probably the same shape. (see p.154) (ibid p.31). The others have linear marks, including some reminiscent of the linear scripts--the "E" sign appears on two

Period VII pieces. It would seem that a marking system originating on the mainland was now in place on Kea.

Only five marks have been found from Period VIII, LHIII. They are all of types seen already from Period VII.

Ms. Bikaki has naturally already made a full analysis of the marks from Ayia Irini, and we should review her conclusions as well as trying to draw new ones. (The following review of Bikaki's commentary comes from Bikaki 1984 pp.42-43 unless otherwise stated.) Briefly, potters' marks became an important phenomenon at Ayia Irini in Period IV, at the beginning of the Middle Bronze Age. In the following period, towards the end of the MBA, some linear signs appear which are also found in the Linear A and B scripts. They continued into Period VIII (LHIIIA-C), though by that time the use of marks had declined greatly.

There are few clues to the use or uses of the marks. It would seem that there was more than one category of mark, with perhaps different meanings. There is a series of composite marks--oval impressions coupled with short incised lines--found on imported pieces of Periods IV and V, with parallels on vessels from Aegina, Lerna and Phylakopi. These marks are similar to those on lead weights from Kea, and may therefore be measurements, perhaps of capacity (p.9). Some Linear A signs found on highly visible parts of vessels in Period V may be labels (p.22), perhaps denoting the contents of the vessel.

Other types of marks such as oval/round impressions cannot indicate capacity or contents, since the same mark is used on vessels of very different shape or size. It should be remembered that marks on open vessels at least appear to begin before those on closed, so that at least to begin with the marks did not refer to contents. The fact that open and closed vessels tend to have a different type of mark may confirm the theory that several meanings are involved. Bikaki suggests three other possible meanings: maker's mark, provenance and destination. To consider the question of provenance first: both local and imported pieces share all categories of marks, with the exception of fingernail impressions which appear only on local pieces. This would appear to militate against the idea that the marks designate the provenance of the vessel, though with such simple symbols it would be easy for different workshops to hit upon the same mark. On the other hand, if the pottery trade was sophisticated enough to require such information, one would assume that some care would be taken to make sure the marks were easily identifiable. Similar problems attend the suggestion that the marks denote the destination of the vessel. It seems unlikely that all the different marks on imported pieces mean "deliver to Ayia Irini", especially as many of them are repeated on locally produced and used pottery.

Overall, the imported pieces have a higher proportion of cups, bowls and closed vessels than the local. There were no deep bowls, goblets or fingernail impressions among them. The local marks appear on a much wider range of

shapes, excluding the panelled cup. These facts may help us to come closer to an answer. As at Phylakopi, the panelled cups form a distinct group. They cover a range of dates from MC mid-late through LH mid. Most, though not all, have oval/round impressions and most are marked on the base. Few other cups have oval marks. All are of a sandy, gray-green pale fabric, mostly decorated with dark brown matt paint: this "pale ware" or, as it is now known, Cycladic White, is considered to be a Melian product (Bikaki 1984 p.22 n.1). Even over such a time span, it is unlikely that the Melian name or symbol for Ayia Irini would have changed, so the marks probably don't indicate destination (though it is possible that not all vessels labelled for a certain destination would end up there.) Two of the cups have composite marks which may have been a measure of weight or capacity (see above p.160), but if it was necessary to verify the size of the cup--as it is for glasses in a modern pub, for instance--then why are they all not so marked? Three of the cups bear the same mark (a single oval impression), but their bases vary in size from 36 to 50 cm. It could be argued that the size of the base is no reflection of the capacity of the cup, but one would expect some standardisation if indeed a system of symbols indicating size was in use. It seems most likely that the marks on the panelled cups were in some way related to the potters who made them, perhaps as a studio name or an aide memoire when pottery was mixed in the kiln.

If we look at all the imported closed vessels of various types, it is interesting to note that the vast majority

are marked on the base and/or low on the side, most often with linear marks, though a group are punched. So even the closed vessels seem not to have been marked for contents, since one would assume that such a label would be more visibly placed. As far as oval/round impressions on imported pieces, most are on cups and bowls, so once again these marks are not dealing with contents.

If we consider the locally made pieces, we have several discrete groups to work with. Six marked deep bowls were found. They are all from Period IV, all of local burnished ware, all marked with fingernail impressions on the foot. Four were found in Room W34, a fifth in nearby Room W44.

A total of 19 goblets were found. 18 were of local burnished ware, from Period IV. Six had fingernail marks, 10 oval/round impressions and two incised lines. Five were found in Room W33--with both fingernail and oval/round impressions--and four in the MBA room under A3 (as was one of the deep bowls). The 19th goblet was an import, found in a Period VII context in W9.

If we look at fingernail marks as a whole, we find that all but one occur on local pieces of Period IV. Types a and b are found on goblets and deep bowls, type c (a smaller group) on cups (Bikaki 1984 p.8). The vast majority are found on burnished ware, though several of the cups seem to be a different, gritty fabric. Four pieces were found in Room W34, four in W33, and individual pieces in

nearby Rooms W44, 41-42, 46, 35 and 42. Three were found in the MBA deposit under A3, including the single import.

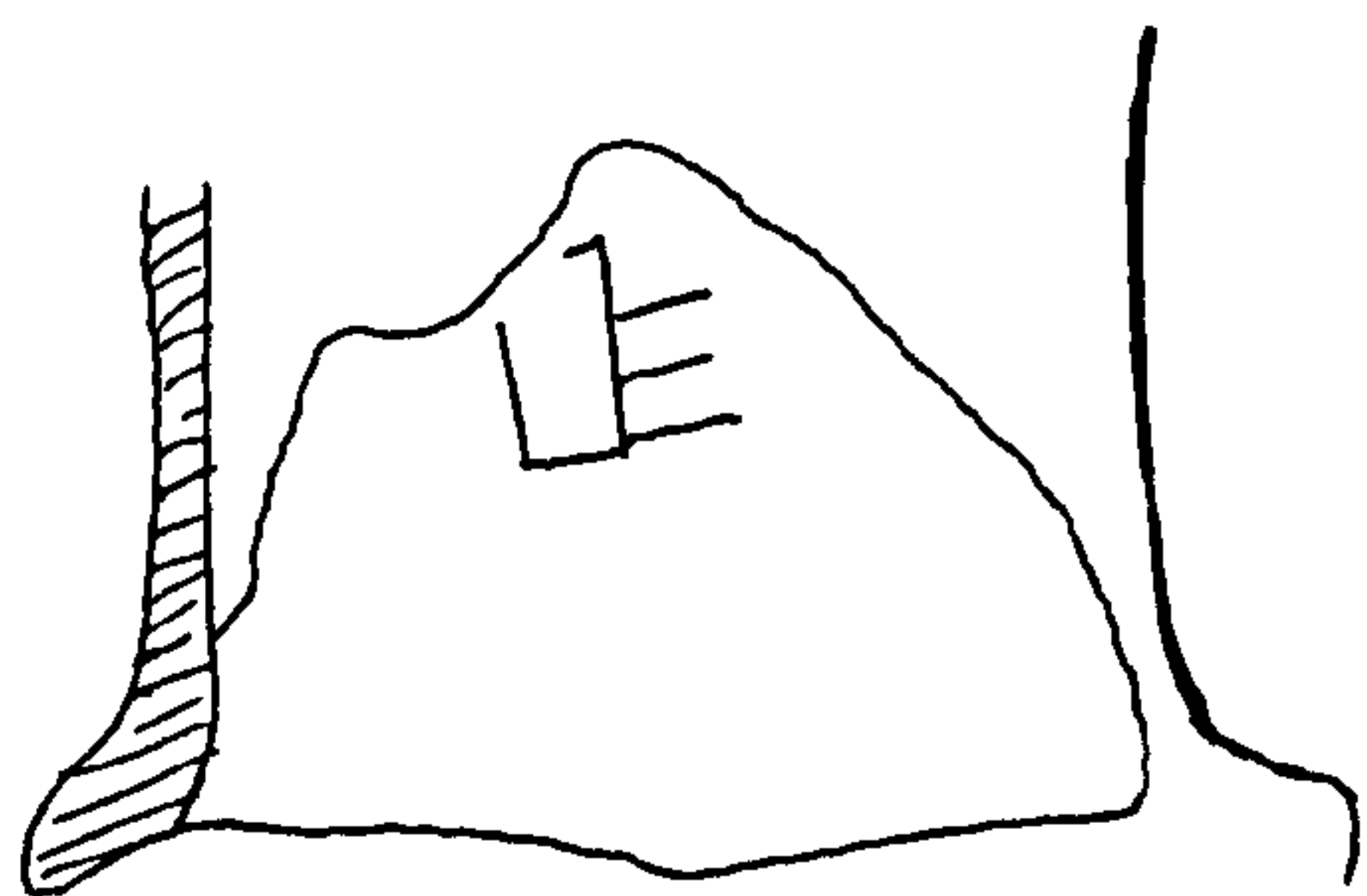
It seems unlikely that all of these clusters are entirely fortuitous. The fact that fingernail marks were confined to a relatively short space of time and a limited range of fabrics and shapes points to their being associated with one potter or workshop. It may be that the production or distribution centre was located in or near the W part of the site near the fortification wall, given that so many of the pieces were found there.

Of the few pieces with elaborate pictorial signs, nearly all are local, indicating a certain familiarity with the linear scripts and perhaps an experiment with labelling vessels--though at least one example is on a Vapheio cup.

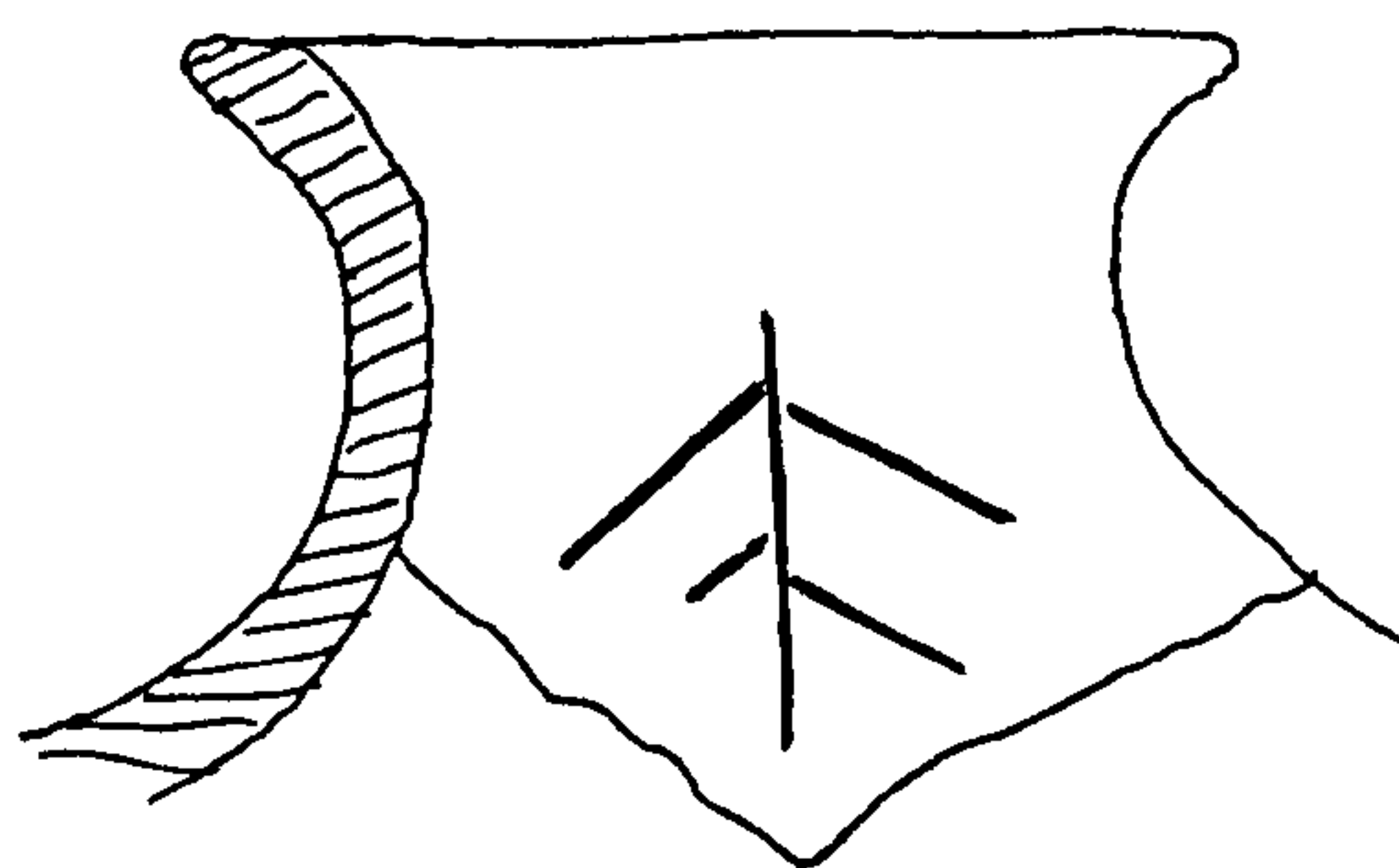
A small group which points to a possible adoption of a system of marks from elsewhere is the Cycladic bowls. These are all marked on the base with oval/round impressions, but while the imported examples are of MH late date, the local ones are LH early.

Although these various groupings give some hints as to the meaning(s) of the marks, it is difficult to come to any useful conclusions. Most of the evidence seems to point away from much labelling to indicate contents, and while there is some indication of a system of weights and measures it could only apply to some of the marked vessels. Provenance and destination seem unlikely in most cases, so

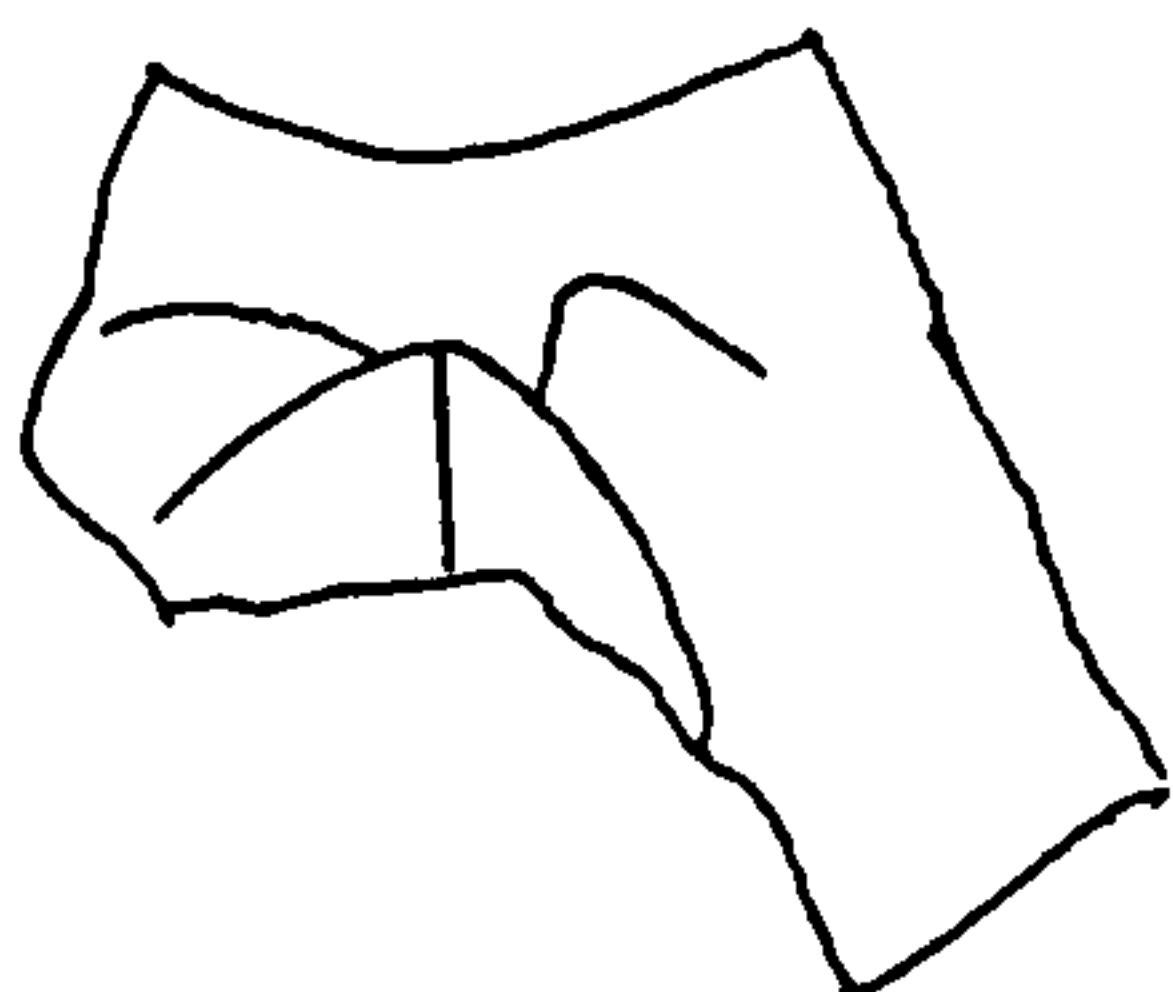
we are left with either some identification of the potter or workshop or some sort of technical note intended to assist the potter, but of no interest to the customer.



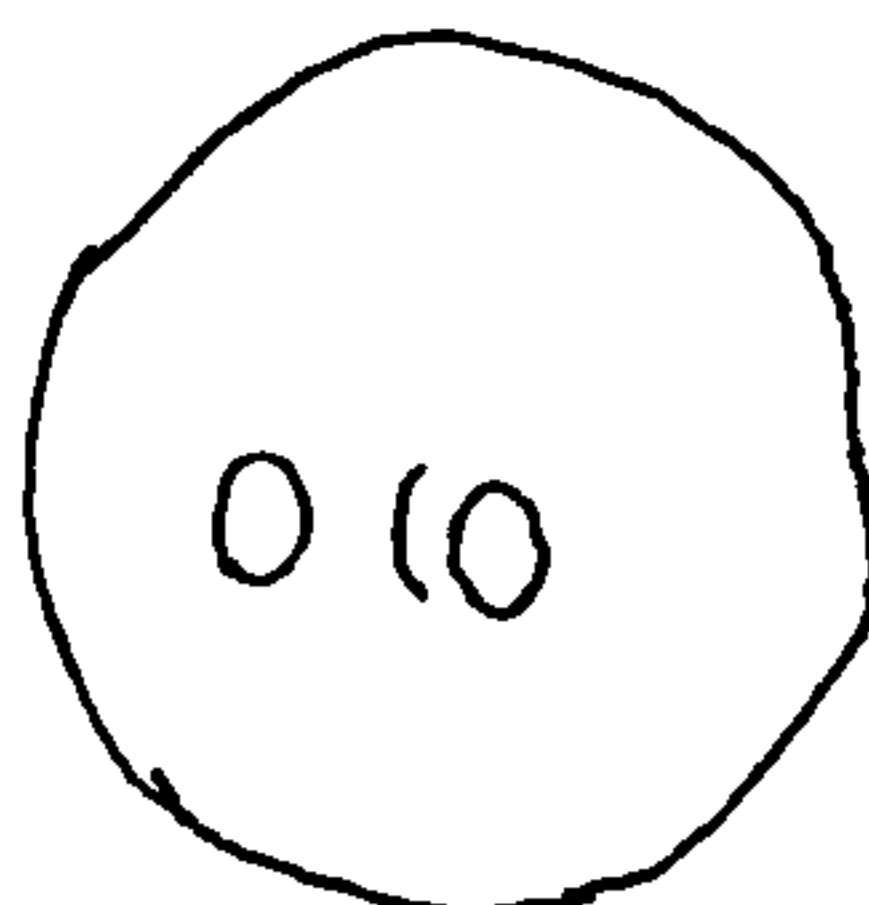
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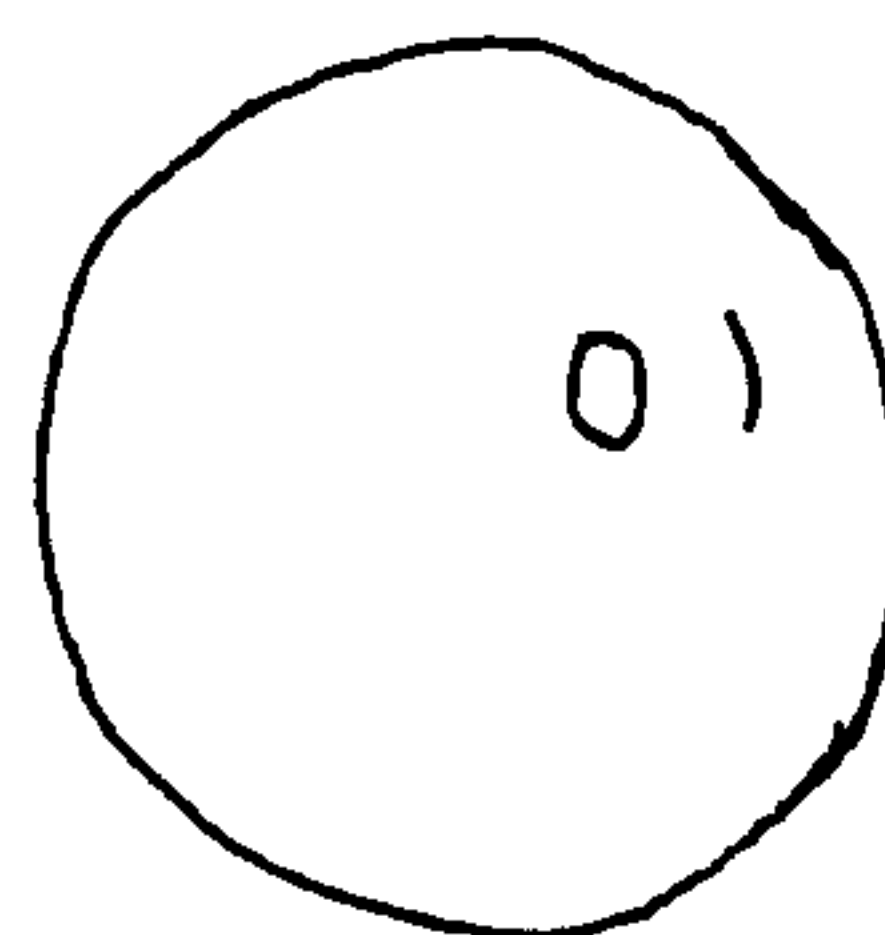
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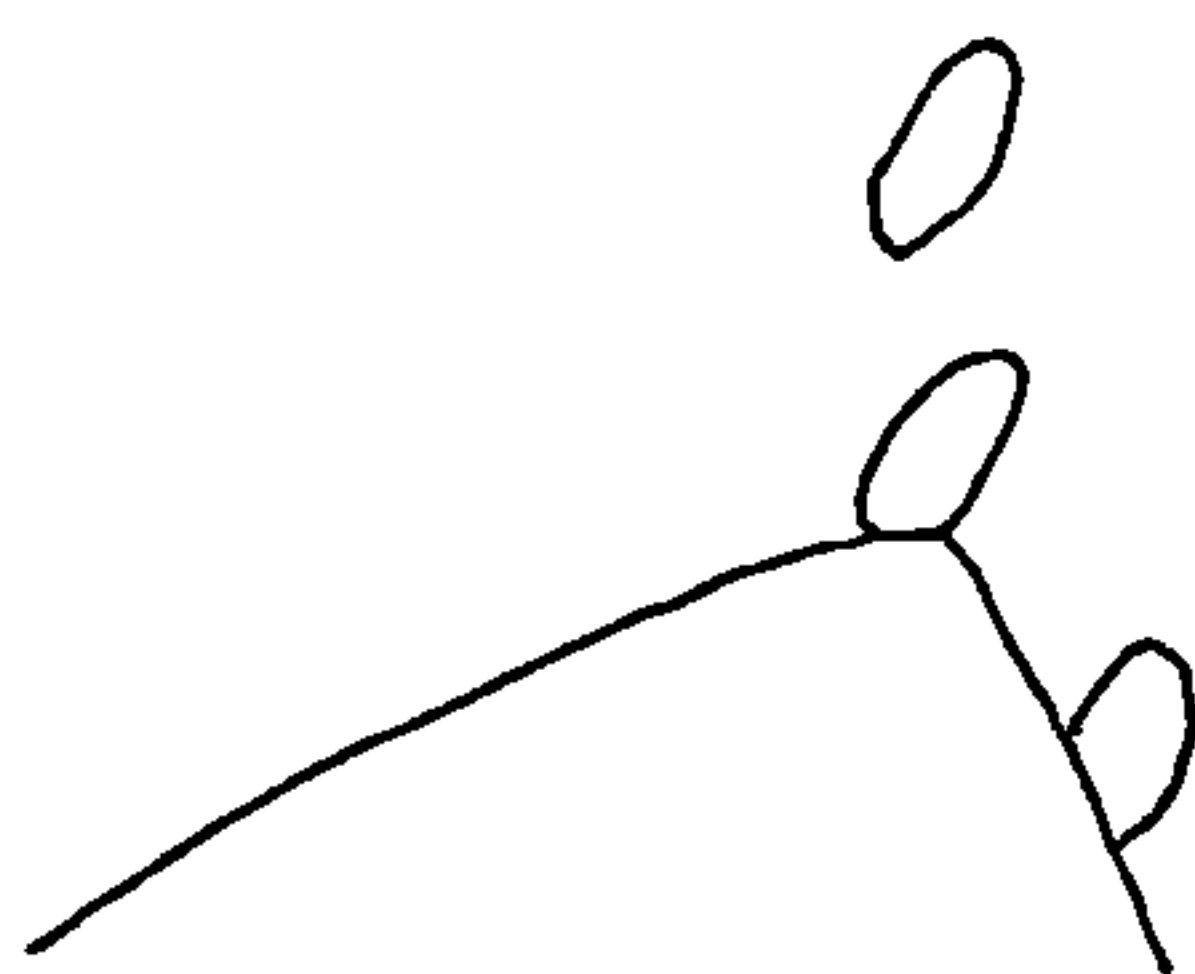
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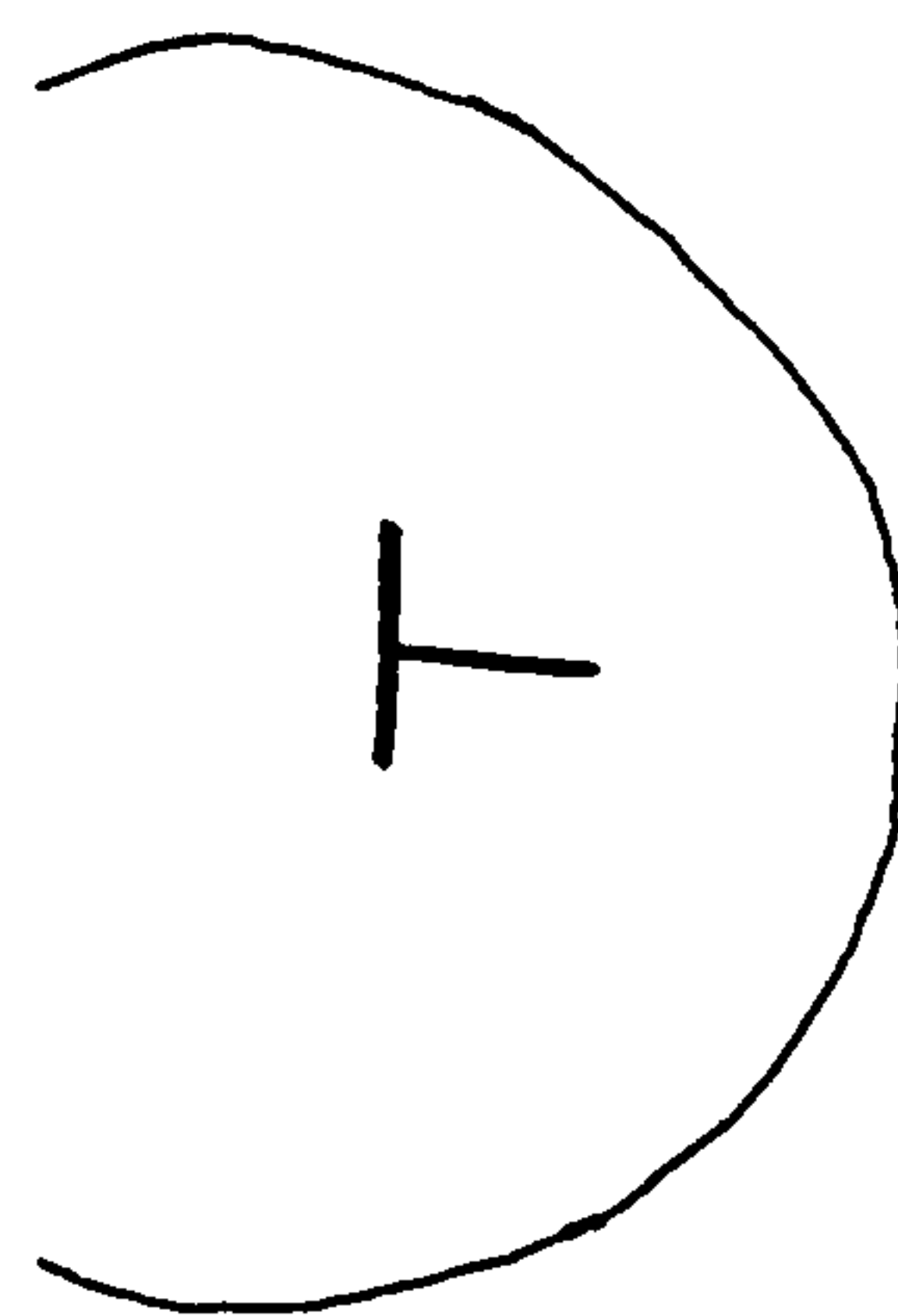
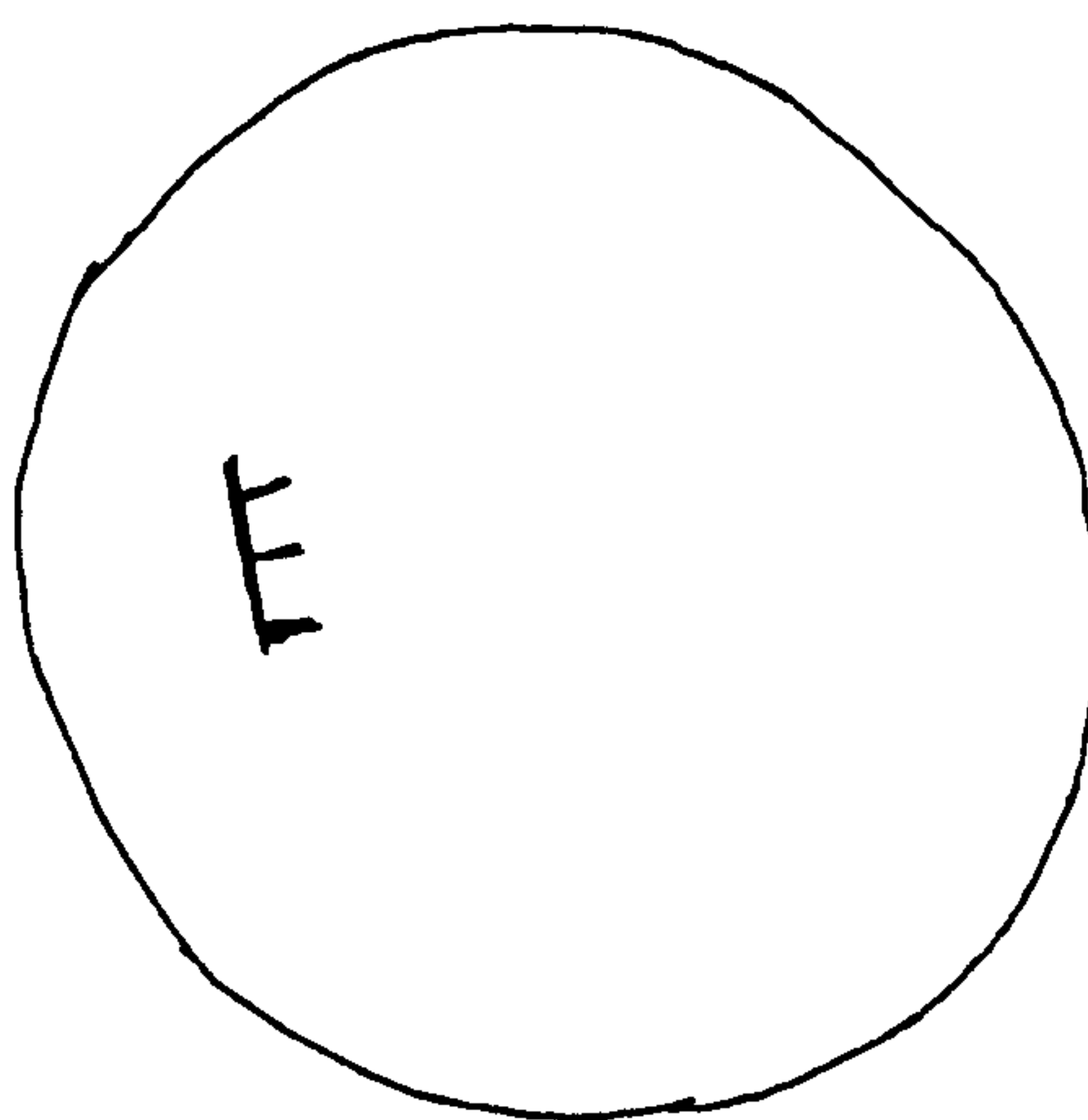
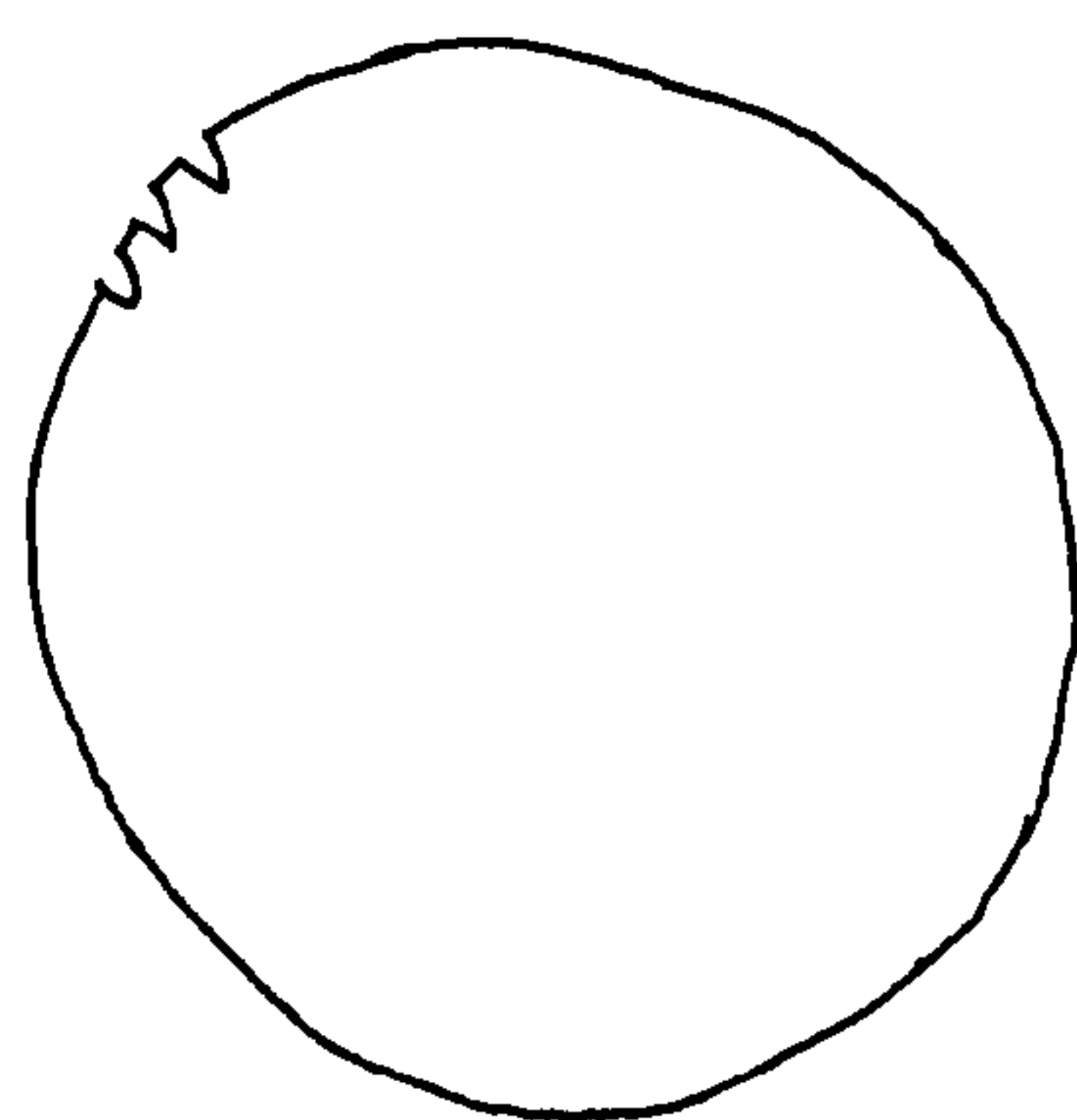
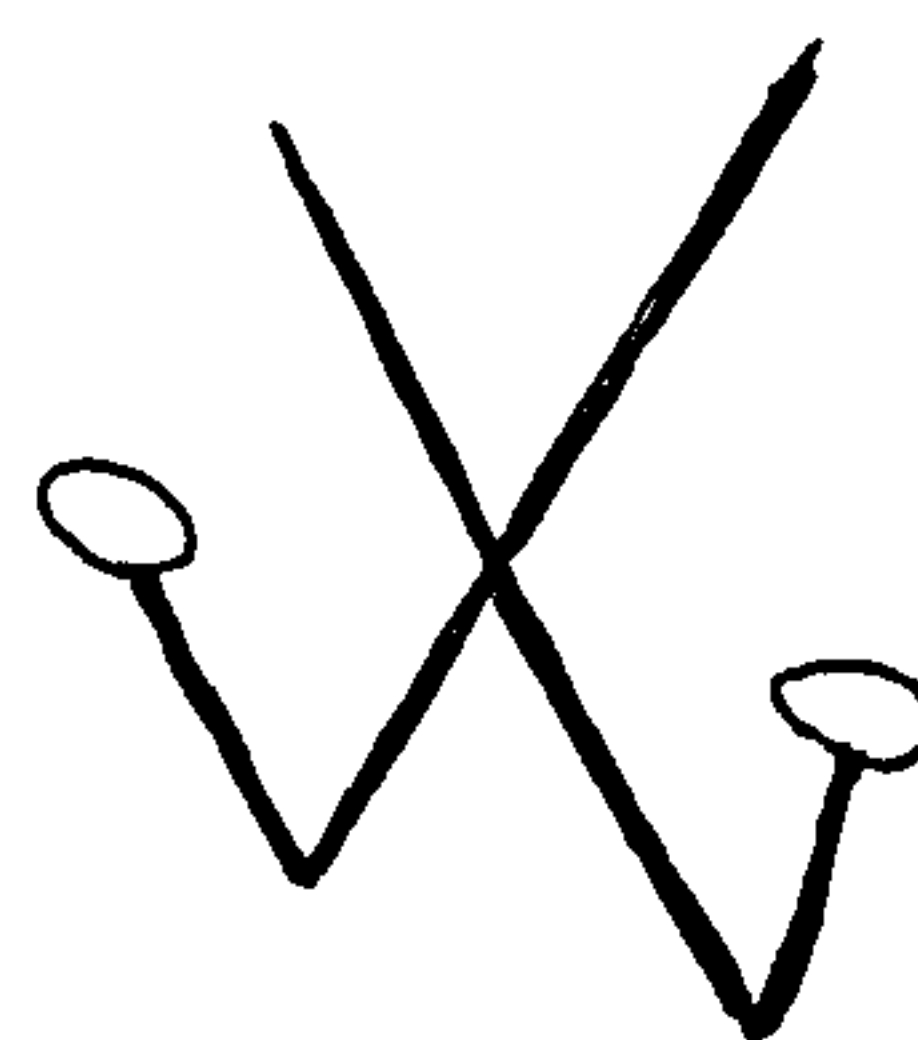
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SECTION V: MAINLAND MARKS (figures 57,58 and 59)

Marks from 15 mainland sites were examined, including Aegina. (The question of Aegina's cultural allegiance is a vexed one. In the EHII period the main site on the island, Kolonna, displayed many of the typical traits of Mainland sites of this time, such as "corridor buildings" and fortifications (Rutter 1993 p.761). It is logical that the early flow of colonists and then cultural ideas would be from the Mainland out to the islands. However, by the MH Kolonna was anything but typical, and Rutter goes so far as to call it "pre-eminent" (ibid p.776). It boasted the earliest known Aegean shaft grave and royal burial, as well as extremely impressive fortifications. It would appear that the direction of flow of ideas had reversed itself, perhaps due to Aegina's rising power at sea (ibid p.780) Even with this reversal, it appears that Aegina's closest links were still with the Mainland, and hence I have included it in this section.)

The number of marks per site ranges from over 200 from Lerna to single examples from several sites. The sites are discussed in alphabetical order and any geographical patterns or variations are considered in the conclusion.

Aegina 42 marks (Felten 1981 and Wunsche 1977. See figure 57). The majority of marks are of two types: oval/round impressions (38%) and linear (33%). The oval/round marks are generally found on the base or side of vessels, often of red polished ware. Their dates range from EHII to MHII. The linear marks are more confined to MHI-II, on the side

of fine ware vessels.

The majority (64%) of Aeginetan marked vessels are open, of EHIII-MHII date, with oval/round marks. 31% are closed, dated to MHI-II with linear marks. For the remaining 5% the shape cannot be determined.

Marks are found on a variety of vessels. The largest group (36%) are EHIII bowls, with oval/round marks. Another group is kantharoi (19%), generally of MHI-II date, with oval/round or linear marks, often under the handle.

There are two main date groupings. 43% are MHI-II. These are mostly linear, with some oval/round. 33% are EHIII, mostly oval/round. In the vast majority of cases there is no information on provenance, but 36% are locally made. They form a very discrete group: all EHIII red polished or plain bowls, most with oval/round marks, though some are linear. They are marked on the base and/or side.

In addition to the red polished ware (33%), there are various fine wares (29%) and some matt painted.

The majority (66%) of marks are on the body of the vessel. Half of those are on the side, oval/round and/or linear, often of EHIII date. Most of them are on open vessels. A smaller percentage are on the shoulder or lower body (12% each). They are generally of MHI-II date, on closed vessels, but where the shoulder marks are more often linear,

those on the lower body are mostly oval/round or finger-nail impressions.

Aghios Kosmas One mark (Mylonas 1959). A linear mark below the handle of an EHII askos of reddish, well levigated fabric. Its provenance is unknown.

Asine 53 marks, from a catalogue compiled by Gullog Nordquist of Uppsala University. This is definitely NOT a complete list of marks from this site. (See figures 57 and 58)

The vast majority of marks are cut (43%) or linear (38%). The cuts are on the base or edge of the base, the linear marks on the base or occasionally the handle. Most of both categories occur on coarse ware, with a date range from MHI to LHI, concentrated on the period MHIII-LHI.

79% of the marks are on closed vessels, mostly marked on the base or edge with cuts or linear marks. 50% of those are of LHI date, the rest spread over the MH period. The relatively few open vessels cover the same date range, mostly with linear marks on the base.

It is impossible to say much about the vessel types, except that over 80% of the marks are on the base of a closed vessel. The date range of marks is from MHI to LHI, with the latter period producing the most marks (45%). Cut and linear marks on base and handle are most popular throughout. Only one EHIII mark has so far been found, and that is on a piece of obviously exotic Adriatic ware.

The vast majority of marked pieces (89%) were imported to Asine, and of those over 90% are of Aeginetan origin. Most of these imports are of LHI date, coarse ware and closed shape. A few pieces are in Lustrous Decorated ware, which appears to be from Kythera or the south Peloponnese (Zerner 1993) No locally produced marks are known.

Coarse ware is the most abundant (72%), especially in LHI. It has cut or linear marks, usually on the base or edge. Various other fabrics were marked in the MH period, including a few Lustrous Decorated pieces (see the analysis of the Lerna marks, p.171) This is a medium fine ware, and all the pieces have linear marks on the handle.

Half the Asine pieces are marked on the base with cut or linear marks, often in LHI. The next most common locations are the edge of the base (17%), with cut marks, also of LHI date and handles (11%) which are more often of MHI date with linear marks.

Athens Agora Four marks (Immerwahr 1971). These are all linear, of MH date. Three are on the side and one on the base. Three of the pieces are jars, the fourth a base. Two of the pieces are of domestic ware, one coarse and one matt painted. The provenance of all the pieces is unknown.

Eleusis Three marks (Crouwel 1973 and Mylonas 1948). They are all linear marks on the handles of MH Gray Minyan

bowls. Their provenance is unknown.

Eutresis Five marks (Crouwel 1971 and Goldman 1931). They are all linear. One is on Gray Minyan and another Yellow Minyan, otherwise the fabrics are unknown. The Minyan marks are on a bowl and jug respectively, both of MH date; the others are all EHIII handles. They are of local origin. The provenance of the Minyan pieces is unknown.

Korakou 13 marks (Davis 1979). Quite a few of the marks (46%) are punched or cut. These are mostly on the base of LHI hydriai/stamnoi of light gray unburnished ware. 38% of the marks are linear, on the same type of vessel as well as conical cooking pots.

62% of the marked vessels are closed. These have mostly punched or cut marks on the base. The open vessels have a variety of mark types on the base and side.

Except for a single unpainted bowl of EH date, all the marks are from LHI or II. The most popular ware (62%) is light gray unburnished, used for the hydriai/stamnoi, while 15% are coarse--these are all conical cooking pots. 85% of the marks are on the base.

Lerna 245 marks. These have been catalogued by Carol Zerner of the American School of Classical Studies in Athens, and should be a comprehensive list. (See figure 58)

A majority (67%) of the marks are linear. Most of them are found on the base (65%), then on the handle or shoulder. The fabric is generally coarse or gold micaceous, either plain or matt painted. There is a wide range of linear marks. 24% of the Lerna marks are cut or linear.

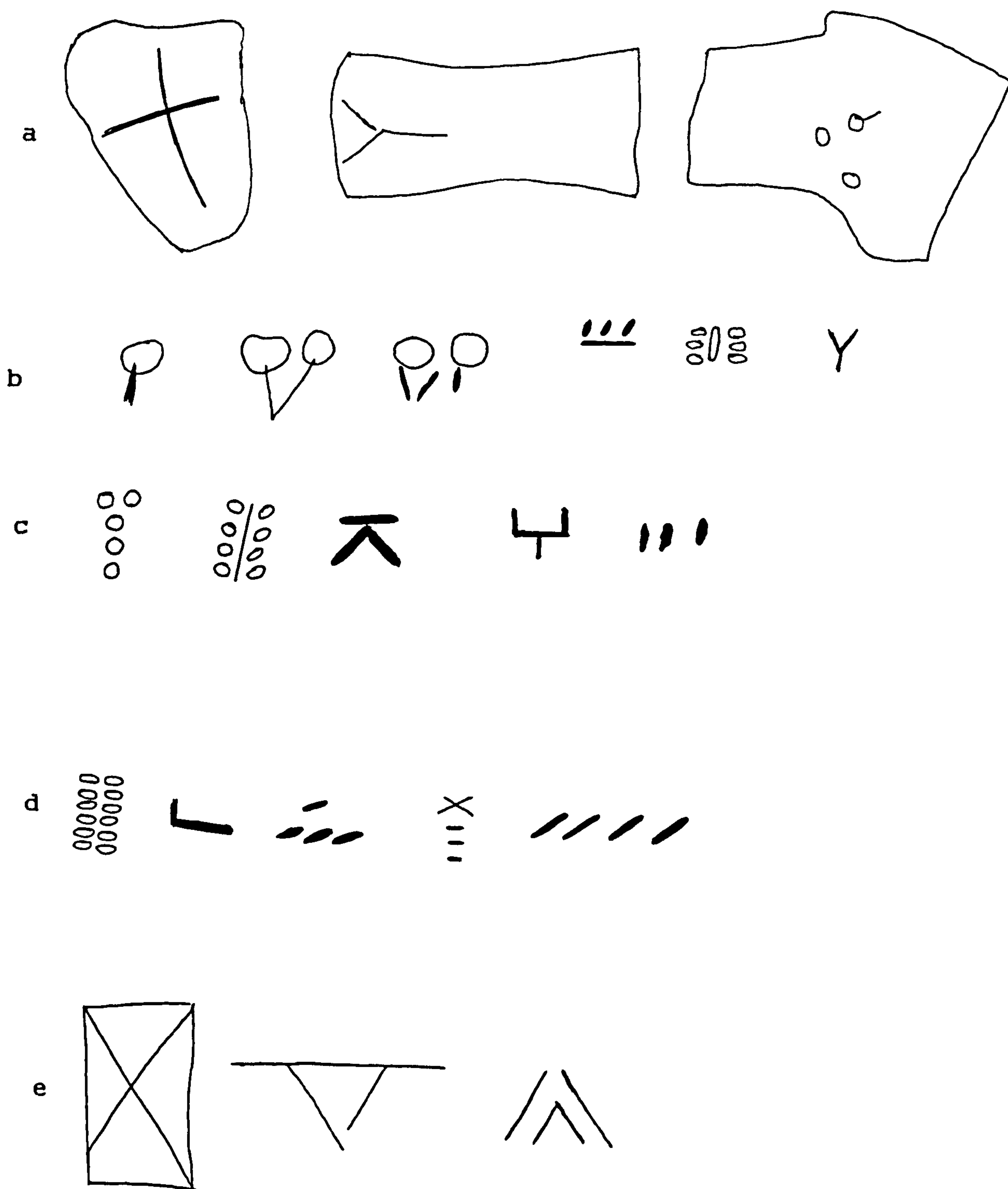
Lerna has a unique series of marks: small applied (as opposed to impressed) circles, sometimes accompanied or joined by lines. Some 20% of Lerna's marks fall into this category. The circles are mostly found on jars of gold micaceous ware, while the circles with lines are more common on the shoulders of coarse micaceous vessels. Both types are found on a few gold micaceous red slipped and polished goblets.

Approximately 50% of the marked pieces are from closed vessels. They are mostly marked on the base or handle with linear marks. The open vessels are marked in the same way. Some 30% are of unknown shape.

45% of the marked vessels are jars. A small majority of them have linear marks. 46% of the jars are marked on the handle, somewhat less on the base. Other vessel types include jug, goblet, cup, krater and pithos, though fully one-third are unknown.

No specific dating information is yet available for the Lerna marks. All are from periods V and VI, MH-LHI.

The vast majority of marked pieces are imported, and most



58. Potters' Marks from a) Asine, b) Lerna (red polished), c) Lerna (matt painted and plain), d) Lerna (Lustrous Decorated) and e) Knossos

of those came from Aegina. The Aeginetan fabrics are gold micaceous plain or matt painted (37%), gold micaceous red slipped and burnished (8%) and coarse micaceous (33%). They are mostly closed vessels with linear marks on the base.

Another fairly large group is Lustrous Decorated ware which appears to be of Kytheran or south Peloponnesian origin (see above p.170). Interestingly, the Lustrous Decorated found at Lerna is medium coarse, while that at Asine is medium fine (see above p.165). It is marked mostly on the handle (never on the base) and the marks are linear.

Lithares, Boeotia 12 marks (Tzavella-Evjan 1980). They are all of EHII date. The largest group are linear (42%): 60% on coarse ware, the rest on various fabrics. The position is evenly divided between side and base, though one is on the interior rim. A few more elaborate marks are linear/pictorial. They are all on slipped ware, two on phialai. The marks are on the base or side. 33% are oval/round, all on the base. They are evenly divided between coarse and fine red slipped wares.

One-third of the marked vessels are open. 50% of these have linear marks, the rest linear/pictorial. They are mostly marked on the side. 17% are closed, with linear marks on base or interior rim. The remaining 50% are of unknown shape.

50% of the marks are on bases of unknown vessel type. Most of these have oval/round marks. Phialai constitute 25%, mostly marked on the side with linear/pictorial marks. There are also a pyxis and a platter.

33% of the marks are on coarse ware, evenly divided between linear and oval/round. 75% are marked on the base, the rest on the side. The rest of the marks are on variously described slipped wares.

67% of the pieces are marked on the base. Half of these are oval/round marks, the rest are linear or linear/pictorial. A quarter of the marks are on the side of open vessels, mostly linear or linear/pictorial.

Menidi Two marks (Evans 1894). Both amphorae of unknown date, marked on the handle. One had a linear sign, the other two linear/pictorial.

Mycenae 12 Marks (Wace 1921-25, Evans 1894 and Ashmolean Museum). They are fairly evenly divided between cut, cut and linear, linear and pictorial. The linear marks are on the base of coarse ware vessels of LHI or II date. The cuts are on the same type of vessel. The linear/pictorial marks are on the side of a Gray Minyan vessel of MH date and on the handle of an amphora of unknown fabric and date.

75% of the vessels are of unknown shape. The other two are

closed, marked on the handle. 62% of the pieces are bases of unknown type, all of LHI or II date. They have cut or linear marks. Two pieces are of MH date.

The same 62% are of coarse fabric. One piece is a jar of domestic ware, of MH date, with a cut mark on the handle. Another is Gray Minyan, with a linear/pictorial mark on the side.

One-half of the pieces are marked on the base, with either linear or cut and linear marks. They are all dated to LHI or II. A further quarter are marked on the handle. They are both closed. The rest of the marks are on the side--linear/pictorial, MH--and edge of the base--cut, LHI or II.

Of the 12 recorded marks, five came from the tholos tombs. They are all of LHI/II date. The marks are mostly linear and cut and linear, though one is a single cut.

Nauplion One mark, on a three-handled vessel of very late Mycenaean date. The same mark is on each of the handles, a linear or linear/pictorial sign resembling a capital H.

Tiryns 77 marks (Dohl 1978. See figure 59).

56% of the marks are linear, most on the foot or base with some on the side or handle. One-half of these are on coarse ware, 21% on light brown plain or painted, the rest divided among various wares. 70% are late MH, the rest LH

or MH, with 12% of uncertain date.

The next largest group is cut marks (29%), usually on the base. 95% are late MH. Again, over 50% are on coarse ware and 27% on light brown. 5% are linear/pictorial, mostly on the side. 75% are on EHII cups of a hard, light coloured fabric, the other is on a coarse ware ?hydria of MH date. Only one piece has an oval/round mark.

60% of the pieces are of unknown shape. The rest are evenly divided between open and closed. The open vessels are fairly evenly scattered over the EH and MH periods. Most have linear marks on base or side. The closed vessels are very predominately late MH, again mostly with linear marks on the base.

Little can be said about the vessel types. 55% of the marked pieces are the foot/base of unknown type. 95% of these are late MH, most with linear and/or cut marks. There are some EH cups or bowls (9%) with linear or linear/pictorial marks on base or side, and tubs or pithoi, all MH, mostly with linear marks on the handle. Other shapes include goblet, hydria, kylix and storage jar.

The vast majority of marked pieces (74%) are of late MH date. They are mostly marked on the base with linear and/or cut marks. The rest are EH and MH, with 7% of unknown date. The EH marks are linear, on base or side, while the MH are linear or cut, marked more often on the

handle.

79% of the pieces are of unknown provenance as far as the publication is concerned. However, it is now felt that many if not all of the marked pieces from Tiryns are of Aeginetan origin (Zerner pers.comm.). 21% are definite imports. Most have linear marks on base or foot. Various open and closed shapes are represented, with open having some advantage, though the majority are unknown. 31% of the imports are in light brown fabric, the rest in a variety of fabrics.

53% of all the marks are on coarse ware. It begins in EH but 80% are late MH. Various vessel types occur, both open and closed, with linear or cut marks mostly on the base but also on the side and handle.

The next group (22%) is light brown, plain or painted. It is all of Late MH date, mostly closed vessels marked on the base and/or edge with linear and/or cut marks. The one oval/round impression is in this fabric. Other fabrics include a hard light coloured type of EHII date (5%), all cups with linear/pictorial or linear marks on the side; red painted (3%), all late MH cut marks on the base and Urfirnis (3%), EH with linear marks on the base. The rest of the marks--all linear--are found mostly on the bases of various fabrics.

The majority of pieces (62%) are marked on the base or foot with linear and or cut marks. 81% of these are late

MH.

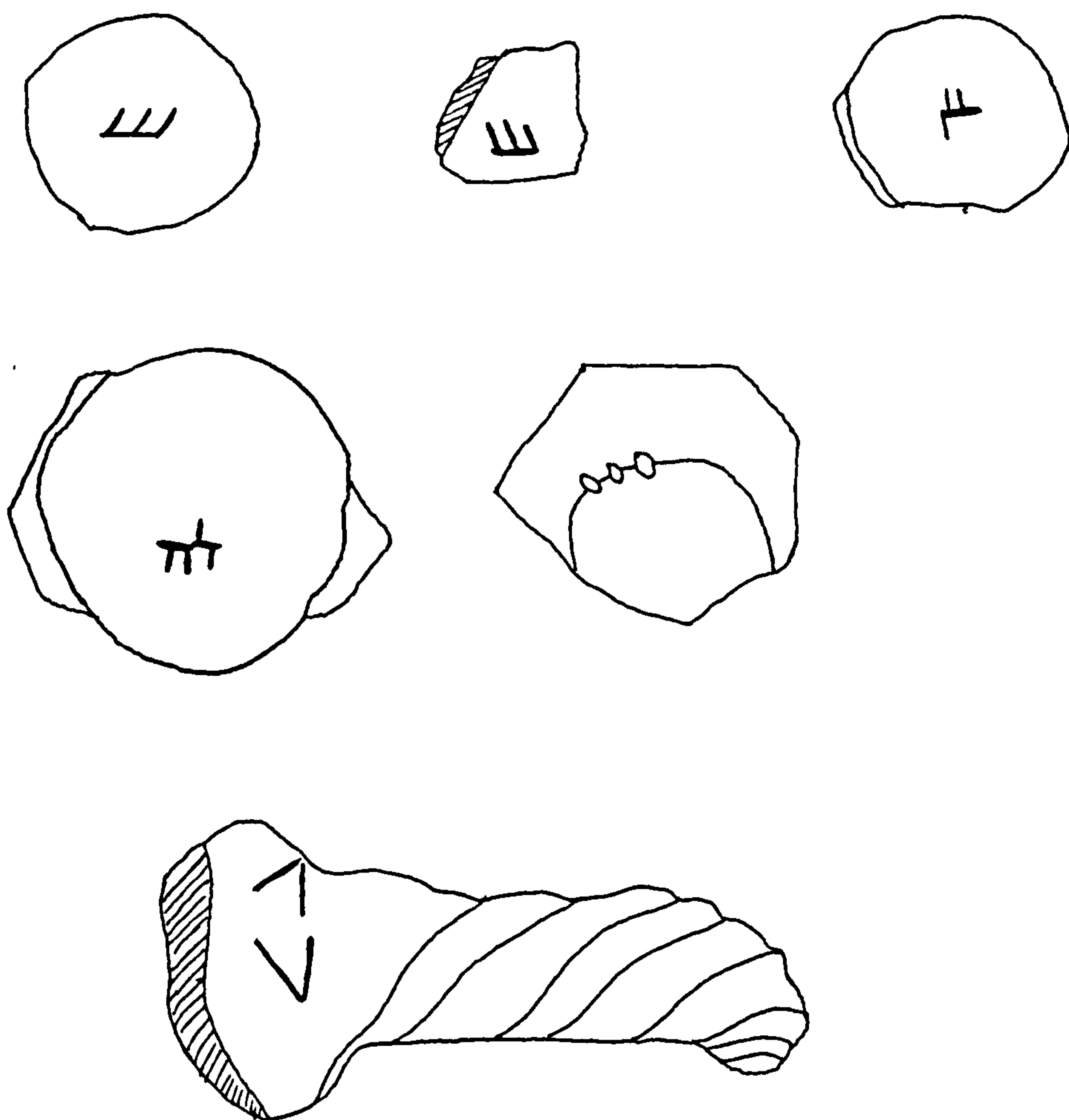
An interesting 42% of marked pieces from Tiryns were found in the Stadt, Graben F. They are mostly late MH, with linear or cut marks. Another 17% were found in the Sud-Syrinx. These are of the same date and mark types, though there is a larger proportion of closed vessels.

Tripolis/Aghios Apostoloi One mark (Howell 1970), a cross on the base of a coarse ware vessel of MH date.

Vounon One mark (Howell 1970), a vertical line with a curved line above, on the base of a coarse ware vessel of MH date.

Zygouries Three marks (Blegen 1928 and Crouwel 1973). They are all linear, found on bowls. Two are of EH date, the third MH. The latter is Gray Minyan, marked on the handle. Of the others, one is unpainted, marked on the base and the other glazed, marked on the side.

When the results from all these sites are considered together, it is possible to see some patterns. The sites are concentrated in the North-East Peloponnese, Attica and Boeotia, though there is of course no way to determine whether this is simply a result of the large amount of investigation which has been carried out in these areas. Linear marks are by far the most common. Both the shapes and vessel types used vary quite a bit, though unfortunately it is often impossible to identify these character-



istics. All over the mainland the base is the most popular location for marks, although the side and handle are frequently used, too. Marks on the interior of a vessel are very rare indeed.

As far as chronology is concerned, the vast majority of mainland marks come from the MH period, though the actual dates range from EH to LHI or perhaps II. With the exception of the single piece from Nauplion, there are no later marks. Marks seem to have appeared earlier in Boeotia and Aegina than elsewhere, beginning during the EH period. The practice then spread to Attica and the North-Eastern Peloponnese through the MH and into the LH period.

The fabrics used vary quite a bit, though coarse ware is common at many sites. The provenance of many pieces is unknown, but the largest known group is imported. Of the four sites with a reasonably large sample of marks, three produced almost exclusively imported pieces: Asine, Lerna and Tiryns, and it appears that the vast majority of these came from Aegina. Aegina itself has the only large group of locally made marked pottery.

The relationships among these four sites are very interesting. Although a large majority of marks found at the Peloponnesian sites are Aeginetan imports, they differ from the marks found at Aegina itself and from one another. This is particularly noticeable in three categories: date, fabric and mark location, as well as, to a certain

extent, shape and vessel type. The Aegina marks are dated to EHIII-MHII, while those from Asine, Lerna and Tiryns are mostly late MH-LH. The fabrics found at the three sites, while varied, have a very large proportion of coarse ware, while that from Aegina is in general finer. Although the shape and vessel type of many of the pieces is unknown, it is interesting to note that 64% of the Aegina marks are on open vessels, compared with only 19% from the other sites. Asine and Lerna show a larger number of closed vessels, though again only 19% of Tirynthian pieces are known to be closed. Finally, the Aeginetan pottery is marked predominately on the side, while that from the other sites is mostly marked on the base.

At the same time, there are distinct differences among the three Peloponnesian sites. Although some EH marks have been found at Tiryns, the majority are late MH, while those from Asine are mostly LHI and Lerna covers the whole range. Asine has a high proportion of cut marks, while the other two tend more toward linear. There is a higher proportion of coarse ware at Asine and Tiryns than at Lerna, though, as has been remarked above, Asine was importing a finer grade of Lustrous Decorated than Lerna. These does not appear to be any Lustrous Decorated from Tiryns, but instead it has its own light brown plain or painted ware, of unknown provenance.

Although the linear type of mark is the most common at all these sites, the actual symbols used vary a great deal from site to site, and there are certain patterns which

seem to be preferred within each site. The linear marks from Aegina are all quite distinctive drawn symbols, as opposed to single lines or groups of lines. Several include tiny circles impressed at the ends of lines. There is no particular pattern of shape or fabric to the use of linear marks. Nearly all of them are of MHI or II date. (Oval/round marks begin in EHIII and are then, apparently, replaced by linear; they never became as popular here as they were in the Cyclades.)

At Asine, the linear marks are in general simpler and more repetitive: X or +, V shapes, parallel lines. These are used on different shapes and fabrics with dates ranging from MH through LHI. The few drawn symbols are also less elaborate than at Aegina, though some are the same. It must be remembered that cut marks are more prominent at Asine than elsewhere.

Several other patterns are popular at Lerna. A vertical line with several short horizontals to each side is found on all the micaceous wares, as is a long horizontal with two or three short verticals above or below it. Columns of short cuts are found on a number of Lustrous Decorated vessels, but on the Aeginetan wares only twice. As well as these distinctive marks, Lerna has also produced the simpler ones: X, +, V, parallel lines--all found on both micaceous and Lustrous Decorated wares. The relatively few unique drawn symbols have more in common with the simple examples from Asine than the more complex ones from Aegi-

na.

At Tiryns, marks consisting of a horizontal line with short verticals above and below are very common, mostly on vessels of late MH date. They are often used on coarse ware. Marks with verticals only above the horizontal are found in the same period but on different fabrics, including light brown. There is a small group of EHII cups in a hard light fabric, with a quadrilateral mark. Tiryns has the usual X or + and single lines of EH and MH dates and various fabrics, and a larger group of unique drawn symbols than Asine or even Lerna, despite that site's greater number of marks. This series of marks includes simple designs such as we have seen at Lerna and Asine and some, though not all of the more elaborate Aeginetan marks.

Despite my use of the word "elaborate", these are all in fact very simple signs, and the use of the same marks at different sites would not be surprising, even if the pieces were manufactured in different places. What is intriguing is the distinct difference in marks on vessels made in the same place and found at sites quite close to one another and to the source of the pottery.

Locally made pottery was being marked on Aegina from the EHIII period. Originally they used oval/round impressions and then moved into linear marks during MHI-II. At the same time, Aegina began exporting marked pieces to Asine, Lerna and Tiryns. However, the same pottery was not being sent to each site, with more coarse ware at Asine and

Tiryns than Lerna. However, even when the same fabrics are found at different sites, they are marked in a different way.

The time frame is too large (MH-LHI or over 600 years) for the groups of marks to represent individual potters, though they could have been used by specific workshops. However, it is more a similarity of types than of individual symbols: e.g., the various groups of applied circles at Lerna. It seems unlikely that a studio would rely on a "trademark" of variously grouped circles.

The marks may refer in some way to the contents of the vessel, at least on closed pieces. The fact that at Aegina there is no coarse marked pottery, while at Lerna it represents one-third of the marked ware and a majority of it at Asine and Tiryns supports the view that these sites were concerned with importing the contents rather than the unremarkable pottery itself. Therefore it is a possibility that the marks on coarse vessels are a memorandum of the contents to allow for proper packing and shipping to the correct destination. On the whole, however, there are simply too many different marks. It is doubtful that Aegina was supplying so many different products to her mainland neighbours. There is also the fact that most of the marks are on the base: it is impractical to "label" a jar in such a fashion that the owner has to tip it up to ascertain the contents. The exception to this may be the Lustrous Decorated vessels from Lerna, which are almost

exclusively marked on handle or shoulder. These, of course, are not Aeginetan products. There is also the possibility that different marks had different meanings or uses. A linear mark on the shoulder could be a label of the contents, while the smaller, less visible marks on the base or low on the side could indicate the destination, for the benefit of those handling the vessel for shipping.

From the little evidence so far available, it would appear that Aegina developed a system of potmarks before the Mainland proper, in EHIII. The idea may have been imported from the Cyclades, since the earliest Aeginetan marks are oval/round impressions, used at Phylakopi from ECII. Quite different marks have been found on Aeginetan pottery at three different sites, and each of these sites seems to have received different types of pottery. Lerna was apparently a rather more "upmarket" customer than Asine or Tiryns, receiving more fine ware and more different vessel types including open ones. It therefore seems that the marks refer to the destination of the vessel and/or the "customer" who ordered it.

One very interesting feature of mainland potters' marks is that their history is so contained. They appear in Aegina in EHIII and disappear after LHI. Why? Inter-site and inter-regional trade continued briskly throughout the LBA, so the need to keep track of the industry did not abate. Once again we are faced with the possibility that the rise of the palace systems with their centralised record keeping so changed the ceramics industry that individual

potters no longer had to keep records actually on their products. Instead, a specialist staff was at hand to keep records and organise trade and shipping.

As well as providing some answers to our questions about mainland potters' marks, this analysis has given rise to more questions. Why did sites like Lerna, Asine and Tiryns not mark their own pottery? Or perhaps they did, but only that which was exported to other sites--but not, apparently, to Aegina, which has not produced any marked mainland pottery. Why aren't all vessels marked, or even all the imported Aeginetan pieces found at our three mainland sites. It would make no sense for only a portion of a shipment to be marked with its destination, if that is indeed the meaning of the marks. Clearly much more information is needed before we can begin to answer these questions.

SECTION VI: CRETAN MARKS (figures 58 and 60)

The marks from 21 different Cretan sites have been examined. Like the mainland, the number of marks varies enormously. Only three sites have a fairly large catalogue: Knossos, Myrtos Pyrgos and Mallia, and the picture is greatly slanted towards the latter, from which 281 marks were carefully catalogued and published by Olivier and Godart (1978).

Aghios Nikolaos One mark (Eccles 1935). A double axe on the side of a pithos of unknown date and provenance.

Chamaizi One mark (Xanthoudides 1906). Two signs on the side of a pithos of MMI date. It is interesting that, although marked "Chamaizi jugs" are known from elsewhere, none appear to have been found at the site itself.

Goulas One mark (Evans 1894). Three signs on the side of a dark "varnished" cup of MMI date. It appears to be of local manufacture.

Hagia Triada Five marks (Brice 1961). All are pictorial, on the sides of pithoi. Two are of LM Ib date, the others unknown.

Kastelli, Chania One mark (Hallager 1975). A Linear B sign on the stopper of a semi-coarse stirrup jar of LM II B date. A number of similar vessels of the same date have painted marks.

Kastellos Eight marks (Pendlebury 1937-38). They are all rough triangles with the lower two sides extended, rather like a capital A with short legs, inscribed near the rims of elongated jars of MMIII date.

Kato Zakro Two marks (Brice 1961). Both are on Mycenaean period sherds. One is a "barn" sign on the side. The other consists of four symbols in an unknown position.

Knossos 48 marks (Brice 1961, Evans 1901-02 and 1921, Popham 1969 and Stratigraphic Museum. See figure 58). Only a few marks are mentioned in the various publications of this site, and many of those catalogued here were found by sorting through the boxes of sherds in the Stratigraphic Museum. It must be pointed out that the search through over 100 EM and MM boxes produced only 25 marks, some of which are in fact unlikely to be real potters' marks.

Most of the marks are linear (44%) and pictorial (20%), usually on the side of the vessel. The most common date is MMIII, though the marks cover the whole MM period. In most cases the shape is unknown, but 36% are closed. They have linear or pictorial marks on the side.

A number of different vessel types are represented. The largest group are the pithoi (16%) and various jars (12%). The pithoi have pictorial marks on the side; the jars pictorial or linear on shoulder or side. They are most often of MMI date (50%).

42% of the Knossian marks are on the side of the vessel with an additional 6% on shoulder, 14% on handle and 6% on handle or shoulder. Most of the marks on the sides of vessels are of MMI or III date (19% and 24% respectively), but the dates cover a wide range. 43% are closed vessels.

The largest fabric group is fine ware (20%), though the extremely fine and hard Kamares ware appears never to have been marked. Fine wares are marked on side or base (40% each), most often with linear marks but some cut as well. 50% are of MMI-II date, while the rest span the MM period.

The Knossian fabrics range from very fine to coarse, though more concentrated on the medium and medium fine types (12% each).

It is interesting that 10% of the marks are from the North East Kamares Area, Room of the MM Stone Lamp--all with cut or linear marks, of MMI-II date. Another 10% are from the palace magazines and 8% from the South East Kamares Area 200A. Another 8% were found in a rubbish heap to the SE. They are all of MMIII date, half closed and half open.

Kommos Two marks (Shaw, J.; P. Betancourt and L.V. Watrous 1978). One is a capital A as at Kastellos, but on the interior of a MMIIB-III basin. The other consists of two crossed hooked lines on one handle of a stirrup vase of LHIIIA date.

Mallia 281 marks (Godart and Olivier 1978. See figure 60)) In addition to the marks catalogued here, there is a group of 25 vessels with impressed marks made by some type of stamp on the base. These were catalogued separately by Godart and Olivier and have been omitted from this discussion because they appear to be a discrete group, possibly made for a different purpose than the drawn marks. It is notable that this is the only group of marks on the base from Mallia or indeed any other Cretan site discussed here. Another group which was omitted consisted of ten vessels stamped with a distinctive oval "eye" or "mouth" shape somewhere on the side. It may be that this is a decorative motif, but once again it is definitely in a different spirit than the other marks.

All the marks are either linear or pictorial. Linear is somewhat more frequent at 52%. 95% of these are on coarse ware of various colours, most often red (37%). They are usually on the side of the vessel. The dates range from MMI to LMI but the majority are MMII (69%). The marks occur on a variety of vessel types, the most common of which are beaked jugs (25%).

Pictorial marks make up 36% of the total. 93% are on coarse ware and 5% on fine, somewhat more than the linear marks. Again they are mostly on the side of different vessels: here beaked jugs are 40% of the total. There is the same date range and concentration on MMII (76%).

Almost 40% of the pieces are of unknown shape, but 47% are closed. The marks are evenly divided between linear and pictorial, most often on the side and of MMII date.

At least 18 different types of vessels were marked, including the famous hatched "Chamaizi jug" (2%), ranging from cups and plates to cooking pots and pithoi. The most common (32%) is the beaked jug, usually of MMII date and always marked on the side. Pictorial marks are slightly more common than linear (43% as opposed to 41%).

The vast majority of Mallia marks are on the side (82%). They are more often linear than pictorial (49%) and more often closed (50%) than open (8%). As usual they are mostly MMII.

In fact 71% of all the Mallia marks are of MMII date. Just over half of these are linear and they are most often on the side (84%). By contrast, only 14% of the marks are MMI and only 7% MMIII.

91% of the marked pieces are of coarse ware. The colours vary greatly but one-third are red. Nearly all are of MMII date and marked on the side. Of the red pieces the most common type is the beaked jug.

4% of the pieces are of fine ware. As usual they are of MMII date and marked on the side or sometimes, unusually, the base. However, the shapes used are different: amphorae, jugs and jars.

All of the marks from Mallia are on local pieces (Olivier pers. comm.).

Mochlos One mark (?) A tilted T with one stroke above, on the side of an EM tall jug.

Myrtos One mark (Warren 1972). A rough cross and two horizontal strokes. It is on the side of an EMIIB amphora with trickle decoration.

Palaikastro Eight marks (Brice 1961 and Eccles 1935). Half of them are on sherds, three of which are of coarse ware. The others are on different types: cooking pot, platter, cup and jar. Where the date is known it is MM. The marks are linear or pictorial. Three marks are on the side, others on the handle, rim or leg.

Petras 10 marks (Brice 1961 and Tsipopoulou 1990). 60% of the marks are linear. Two of these are on pithoid or bridge spouted jars; the other known types are pithos and amphora. They are all of coarse fabric. Most are LMI, though one is LMIII. They are in various positions. Only one is definitely pictorial, and that is on a coarse ware kalathos of LMI date. A notable fact is that 30% of the Petras marks are on the upper rim surface.

Phaestos Four marks (Brice 1961 and Pernier 1935). Two are pictorial, long inscriptions on pithoi. The others are

Prodromos Botsano One mark (Evans 1909). Three pictorial signs on the side of a Chamaizi jug of MMI date.

Pyrgos 47 marks (Stratigraphic Museum. See figure 60). 62% are linear. The vast majority (90%) are on the side. The fabric varies from fine to coarse: 34% are fine and 38% medium coarse. Unlike most of the other sites Pyrgos has some cut marks (13%. A further 8% are cut or linear). They are found mostly on the handle (66%). Again the fabrics vary but one-third are medium coarse and another third coarse.

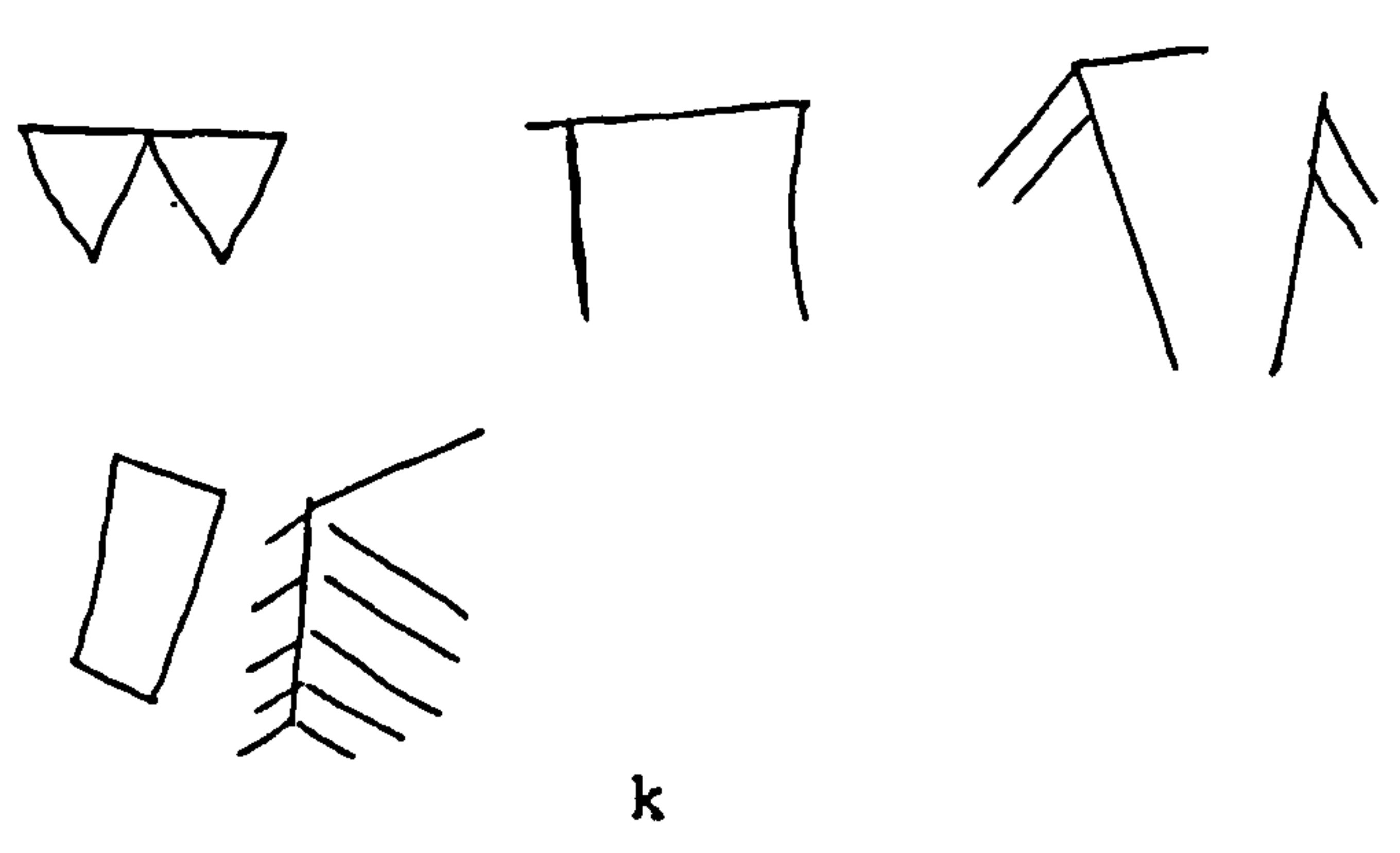
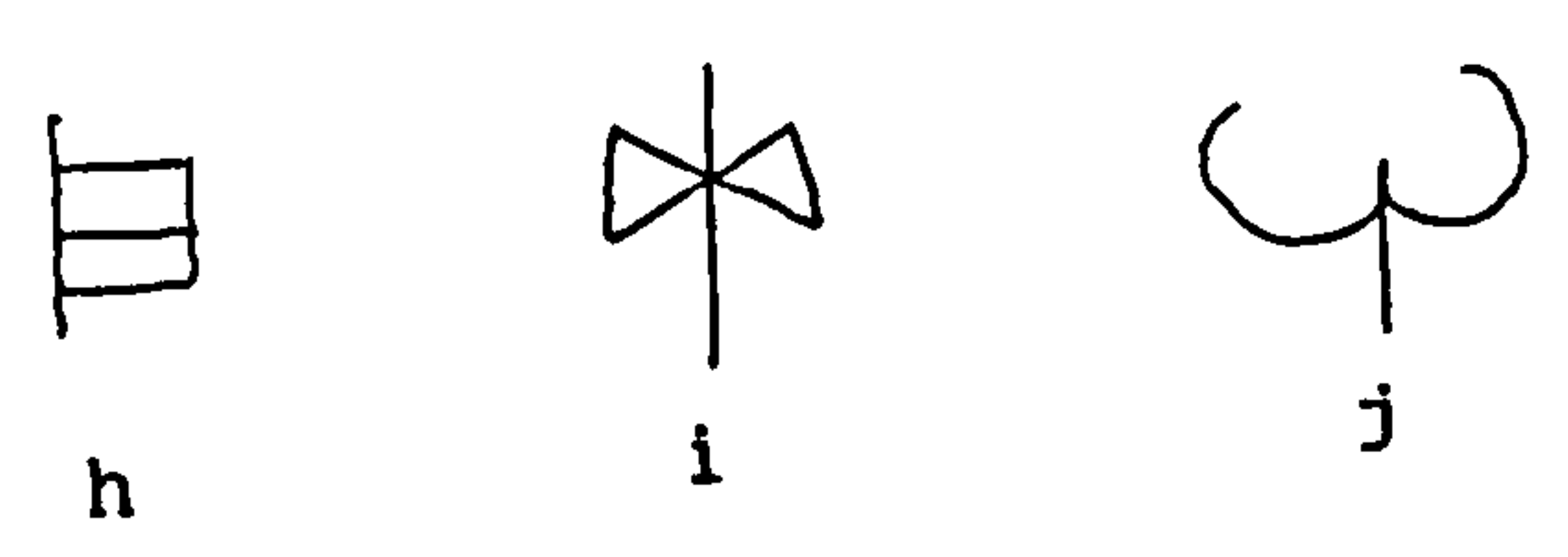
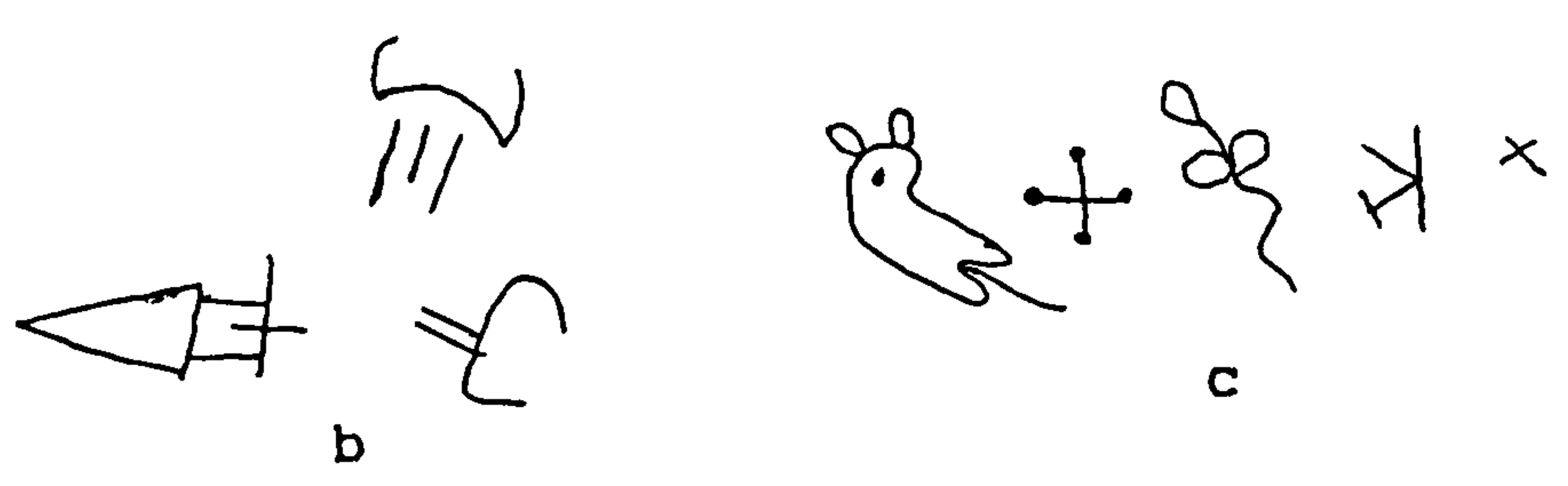
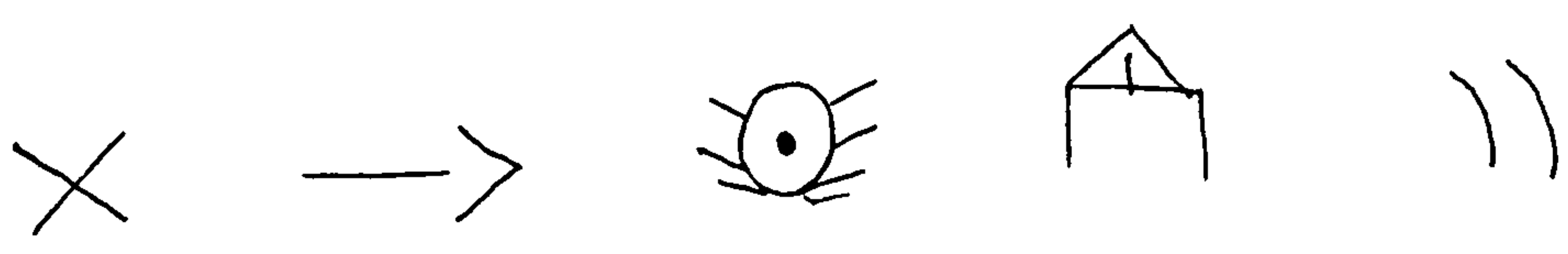
Unfortunately, no information is available on the shape, vessel type, provenance or date of the Pyrgos pieces.

In general there is a wide spread of fabric types. 37% are fine. They most often have linear marks (65%) on the side (82%). 33% are medium coarse, with the same characteristics.

The vast majority of marks (72%) are on the side of the vessel. 79% of these are linear. A further 22% are on handles, but these are more often cut (40%). There are no marked bases from Pyrgos.

Schoinia One mark (Brice 1961). Three pictorial signs on a pithos.

Trapeza One mark (Pendlebury 1935-36). Three signs on the base of a fine ware jug of MMI date.



Tylissos Four marks (Brice 1961). Three are cups of EM-MMI date. They are all marked on the base with linear or, in one case, a linear/pictorial sign. The fourth is a pithos dated to MMIII-LMI. It has five pictorial signs on the side.

In general it seems that Cretan potters used a limited number of mark types: the vast majority are linear or pictorial. Although the dates vary from EM through the Mycenaean period, they are strongly concentrated in the MM. It is very rare for a Cretan piece to be marked on the base, with the exception of the group of impressed marks from Mallia, mentioned above (p.191). This is in direct contrast to the situation on the mainland, where the base is the most common location for potters marks, and to some extent the Cyclades, where it is also favoured. The vessels marked are almost always of coarse ware, and apparently more often closed than open, though that is often an unknown quantity. Many different types of vessel are represented, though the only substantial group is the beaked jugs from Mallia.

We do not have the material to institute as detailed a comparison among several sites as we did for the mainland, because everything is so heavily weighted towards Mallia. This is in itself an interesting phenomenon. Knossos has been very extensively and continuously excavated, studied and analysed for close to a century, originally by a man who was especially alert for signs of writing, and yet it

has produced a mere handful of marks, while its fellow palace at Mallia has nearly 300. There are nearly the same number of marks from a relatively small and unimportant site like Myrtos Pyrgos as from Knossos.

The most notable fact about the marks from these sites, especially Mallia, is that while many of them are the usual groups of lines, X or +, V.T etc., there is a large group of more elaborate pictorial signs. These are often known from the "hieroglyphic" script which preceded Linear A, and are found, at Mallia at least, on tablets and seals as well as pottery.

Nearly 20% of the Mallia marks are the so-called "gloved hand", though in fact "mittened hand" would be a more accurate if less dignified description. Not surprisingly, most of them are on the side of MMII vessels. Beaked jugs make up 37% of these, which is somewhat higher than the percentage of that vessel type throughout the site generally. Another large group (10%) is the stylised bukranium, which appears in the same place and date. Beaked jugs make up an even larger percentage here (61%).

At Pyrgos, 13% of the marks are the double triangle--and a further 17% are parts of triangles which could be incomplete versions of the same sign. The sign appears on tablets and seals from Mallia, though not among our potters' marks from that site.

It makes a certain amount of sense that we would find

hieroglyphic potters' marks on Crete and not elsewhere, since hieroglyphic writing developed into Linear A, which was transformed into Linear B for the Greek speaking mainlanders. What is noteworthy is that while these first exponents of writing seem to have been quite happy to use it for marking pottery as well as record keeping on tablets, the habit died out during the use of Linear A and B--in fact, on the mainland the independent use of marks all but vanished coincidentally with the arrival of Linear B. It may be that at Mallia we are seeing some early experiments with hieroglyphic writing, which later became more formalised and perhaps more rigidly controlled and ceased to be used for marking pottery. There is even a possibility that the use of the system began with pottery, since some marks like the gloved hand appear on MMI vessels while hieroglyphic tablets and seals begin in MMII (Godart and Olivier 1978 p.35).

So there is the possibility that on Crete, or at least at Mallia, a system of marking pottery grew up with the development of writing or, conversely, that the idea of a symbolic recording system was developed from the use of individual marks on pottery--this is clearly the less likely of the two possibilities (but see below p.205 for a similar hypothesis concerning the marks from Tepe Yahya). But once again we are faced with the question of why the potters marked the vessels at all. Godart and Olivier are firm in their assertion that the marks did not indicate the contents of the vessel, for several reasons. In the

first place, over 60 different marks have so far been found, and it is unlikely that so many different commodities were being produced and stored. Secondly, there is a great dearth of ideograms with which we are familiar for certain common items such as grain, wine and oil, which one would expect to be heavily represented. Also, many of the marked vessels were of types which probably had a variety of uses and contents throughout their lifetime. Finally, it is noticeable that there is no clear association of one particular mark with one particular shape of vessel (Godart and Olivier 1978 p.35).

It seems equally unlikely that the marks are some notation about the vessel itself, as the same vessel often bears different marks, and there are over 60 different marks on only 20 types of vessel (ibid).

When discussing the marks from the mainland it was suggested (above p.185) that many of those from Aegina were somehow related to the destination of the shipment or the customer who ordered the vessel. Given that all of the Mallia marks are on local pieces, the idea of destination becomes improbable. A customer's name is slightly more likely. That would provide a comfortable explanation for the great number of marks at a site like Mallia, as well as the dominance and continuity of certain marks: if the gloved hand represented the "royal household" or the bukranium the "house of Poseidon" or some such ideas, they could continue in use for as long as their meanings were recognised, while the generality of the population un-

doubtedly provided enough names over the years to account for the multitude of less common signs. This explanation of the marks also allows the acceptance of the theory that only one "master vase" was marked in each kiln load. It would then indicate "this batch belongs to the X household." Of course, it is easy to see how a large establishment could be ordering substantial quantities of pottery, a kiln load at a time: such items were in common use and very breakable, so it would be necessary to get frequent replacements. But would a smaller family be ordering a whole batch at once? And if only one piece per order was marked, then combining two or more orders in a single firing could lead to confusion. Clearly we have not yet found the whole answer.

Godart and Olivier have suggested (1978 p.36) that only one pot per kiln load was marked, which would help to explain why such a small proportion of all the pottery produced was actually marked. However, the marks seem too visible and conspicuous to be merely aides memoires for a kiln attendant. The idea of a potter's or studio's trademark would be very appealing, were it not that the same marks appear on tablets and seals. Of course this does not totally discount the possibility: the name "Wedgwood" can--and does-- appear both on the base of fine china and in books, and need not even refer to the same person or firm.

Another possibility is that the marks represent the name

of the owner or the household for which the pots were destined.

It is interesting that nearly all the Cretan marks are on coarse ware. Although it makes up a sizable proportion of the mainland marks, there is still a fair amount of finer pottery, while in the Cyclades even less coarse ware is marked. On Crete the number of marked fine ware pieces is vanishingly small. Once again we are faced with the inevitable question "why?". There is no doubt that the Minoan potters could and did produce pottery of unsurpassed fineness, including the often exquisitely delicate Kamares ware. Yet almost none of it was marked. Perhaps the fine ware was made on a more individual basis and was more easily recognisable. Certainly the Kamares ware was decorated in a profusion of different styles and motifs which almost defy cataloguing. There is also the possibility that the potters or their customers were more concerned about the aesthetics of the fine pieces than in emblazoning them with identifying marks. Perhaps they were purchased on a different basis, and made not specifically to order but as stock from which a customer could choose--though that would not preclude marking if the mark advertised the potter in some way.

One tenuous connection with the Mainland may be in Lustrous Decorated ware, which is of S. Peloponnesian origin but may derive from Kythera and thence from Crete (Zerner 1993). Certainly it bears the highly visible linear marks common on Minoan pottery.

On Crete, marking seems to have more local significance than it does on the Mainland or in the Cyclades: indicating the customer rather than the general area of destination. It must be remembered that this was the era of the first palaces and presumably a more centralised organisation of production and distribution was developing here than on the mainland. Perhaps the larger scale pottery production, including the very fine wares--which after all indicate a large investment in a non-essential industry--was being organised and recorded at a higher level, while the humble local industry of common kitchen ware was left to the individual potters to handle in their own way.

SECTION VII:POTTERS' MARKS FROM OTHER CULTURES AND PERIODS (figures 61 and 62)

Having examined the potters' marks from Phylakopi and other areas of the Aegean, it may be helpful to consider the use of marks from better documented periods and places. The practice of incising marks onto pottery prior to firing is and has been a quite common one. They can be found in different cultures all over the world and from many different periods. Without making an exhaustive study of the subject here, we can examine some examples and perhaps gain some insight into the various uses to which potters' marks have been put.

In Egypt marks are found, albeit in small numbers, from pre-dynastic times (Schmidt 1903 p.458, Helck 1990 p.1). They appear almost exclusively on large jars, and while they were used at the same time as the comprehensive Egyptian hieroglyphic script, they seem to have been quite separate from it (Helck 1990 p.1). The meaning of the Egyptian marks is disputed. Zaki Saad has suggested that they denote the future contents of the jar, but Helck insists that there are too many different marks for them to indicate contents. He also feels that each mark appears over too long a period for them to be the names of individual potters (ibid). His tentative conclusion is that the marks indicate the "institution" to which the potters belonged. (ibid p.2).

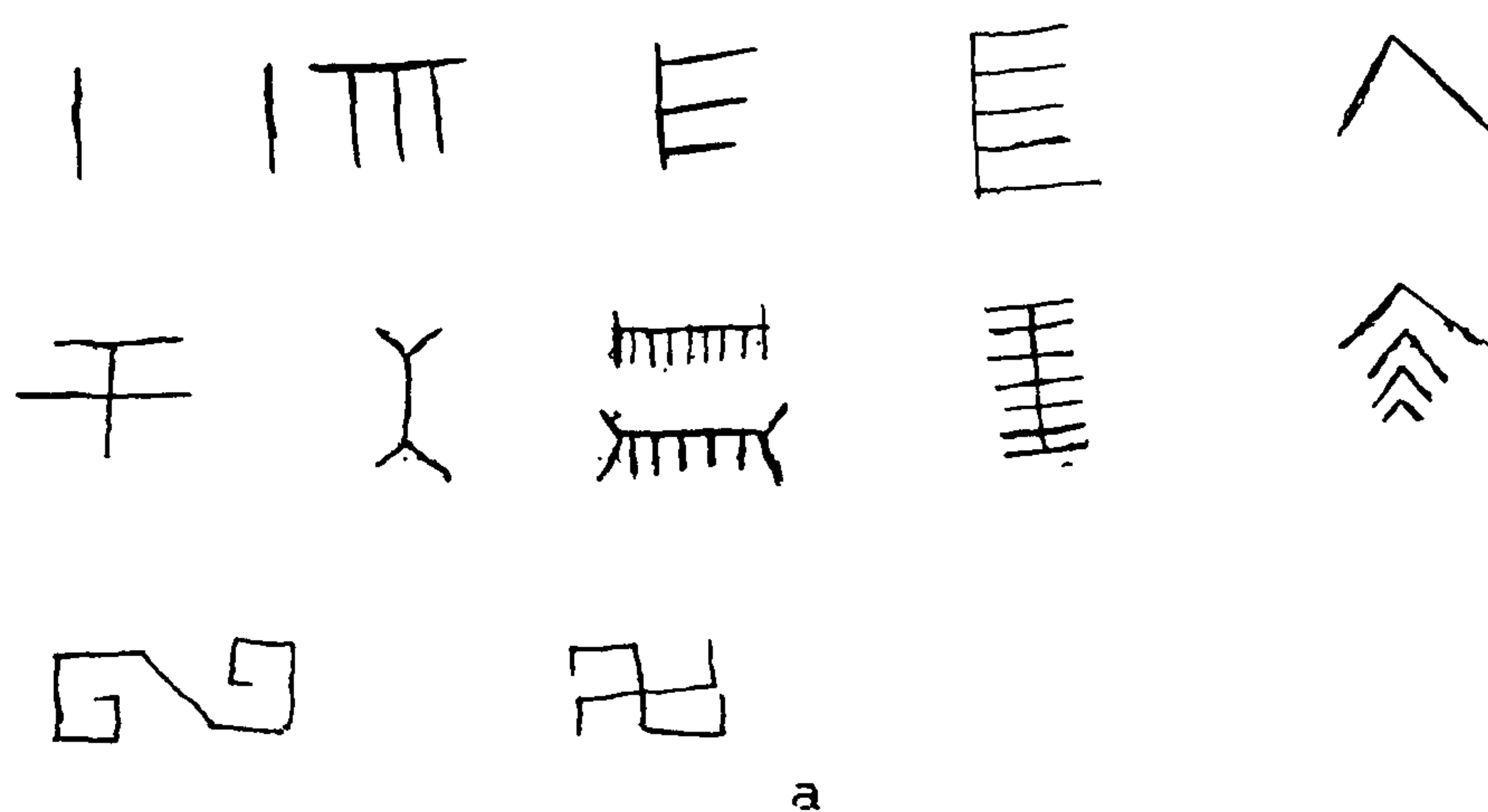
Helck illustrates some 42 different marks, which could be found singly or in groups of two to six, sometimes with

groups of dots or small strokes which may indicate numbers (ibid pp. 2,1). For our purposes perhaps the most interesting facts are that the marks only appear on a very small group of pottery, over a long period of time, and that there is quite a large number of different marks used, only some of which are known from the hieroglyphic script. It would appear that in dynastic and even pre-dynastic Egypt, potters' marks were used in only a few very specific situations.

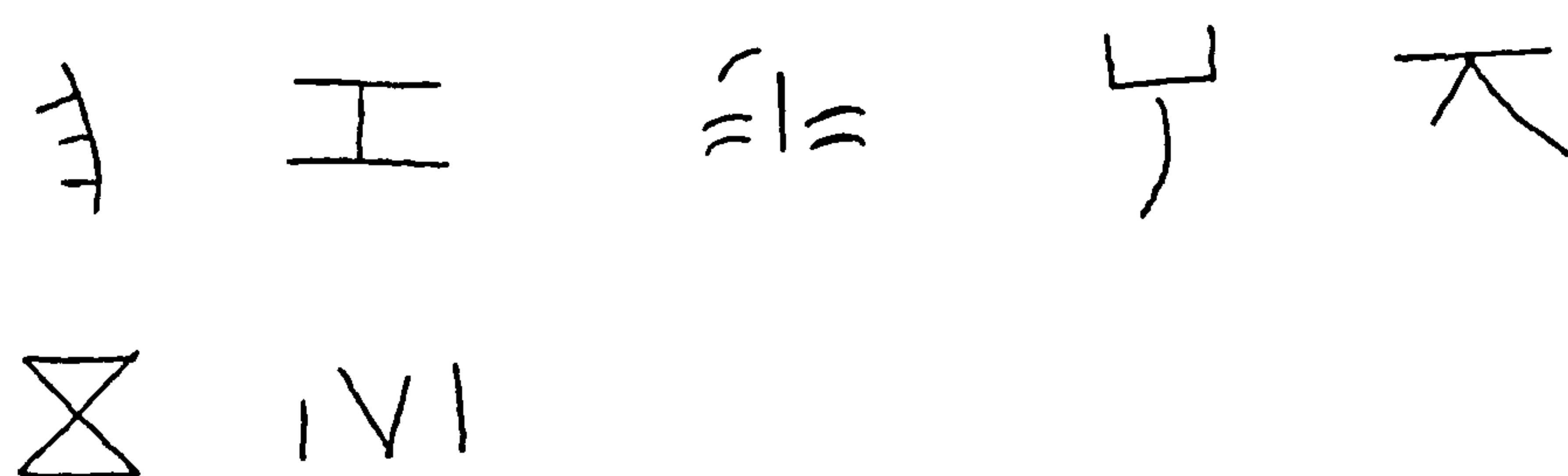
Two Egyptian sites excavated by Sir William Flinders Petrie, Kahun and Gurob, produced a number of pre-firing marks, but the analysis is rather confusing. Petrie states that the Kahun marks are all on XIIth Dynasty pottery, and that all the pottery from Gurob is XVIIIth Dynasty (Petrie 1890 p.43), but also says that the Gurob pottery is exactly like the earliest from Mycenae and Thera (ibid p.42). Overall his assumption is that the marks are foreign, probably Aegean. He envisages the possible sequence thus: at the end of the XIth Dynasty, Egypt fought a war with the "Ha-nebu" or Lords of the North, a title which later always refers to the Aegean. Petrie suggests that first Aegean captives, and later traders, saw Egyptian masons' marks and hieroglyphs and adapted them for their own potters' marks (ibid p.44). We can discount this theory of the origin of Aegean potters' marks, because many of them are in fact earlier than the XIIth dynasty, which ended ca. 1786bc. (See figure 61)

Potters' marks are also known from a number of sites in Indo-Iran. A site with a fairly large corpus is Tepe Yahya, in S. Iran (See figure 62). It has produced some marks, mostly on coarse, handmade bowls, cups and jars. (Potts 1981 p.107). The marks are most often located low on the side, but are sometimes on the base or upper body (ibid p.108). Potts has divided the Tepe Yahya marks into 20 sub-groups. Some, such as groups of invariably straight lines or punched dots, may be related to a counting system (ibid p.109). Others are more complex and it is suggested that they contributed to the Harappan script. Some marks from Aegean sites are also used in the writing systems such as Linear A, but that is the only evidence that the marks might have had some influence on the scripts. In an interesting twist, Potts also suggests that both the Tepe Yahya marks and the Harappan script developed from the Proto-Elamite system (Potts 1981 p.116): the only suggestion I have found of such cross-fertilisation between true writing and potters' marks.

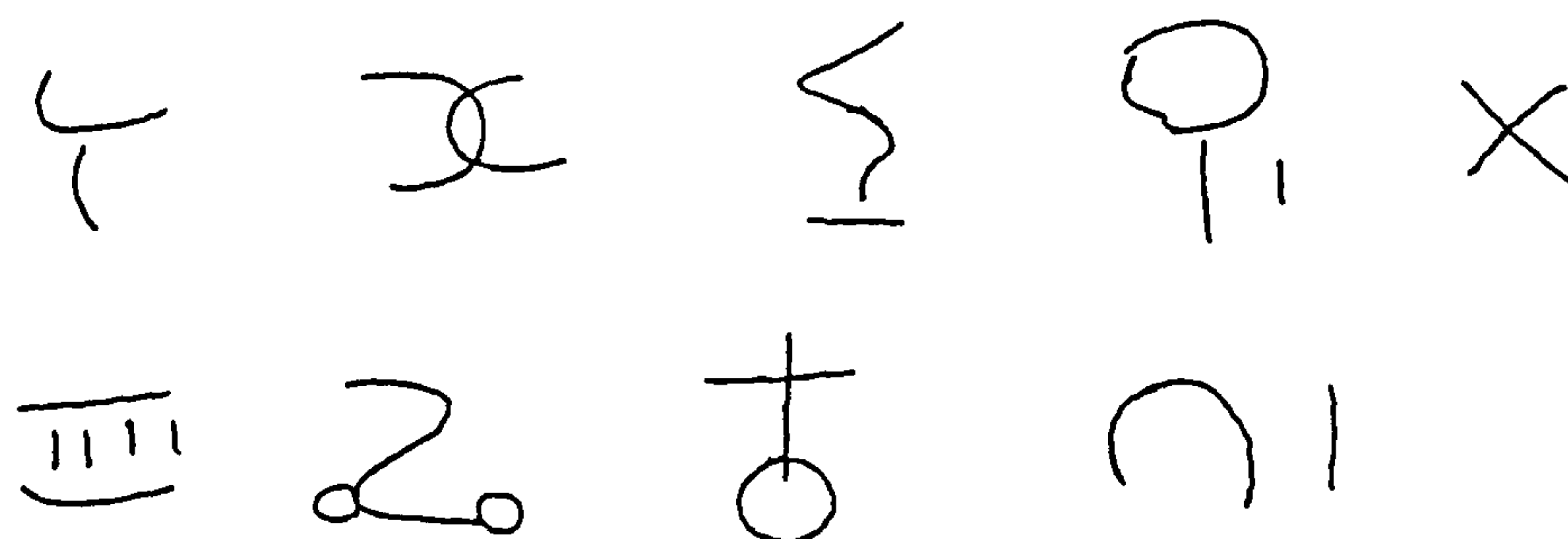
Pre-firing marks are also known from the Neolithic Vinca culture of the Balkans (Renfrew 1979 and Schmidt 1903. See figure 61). Schmidt describes a number from the site of Tordos. They are usually found on the base or low on the side, either groups of simple lines or more complicated drawings. Similar marks can be found on clay tools and disks (Schmidt 1903 p.457). Schmidt makes a number of comparisons with marks from Troy, Egypt and the Aegean (ibid p.458 and table 41). He suggests some cultural connections among these various areas because of the



a



b



c

62: Potters' Marks from a) Tordos, b) Kahun, c) Gurob

correlations in marks (ibid p.459), though given the simplicity of even the most complicated signs, it is just as possible that they evolved independently.

In the Greek world, the collapse of the Mycenaean system seems to have taken the use of potters' marks with it, though dipinti continued to be used. Graffiti on pottery are among the earliest extant examples of the new alphabetic system, and the use of painted alphabetic trademarks and ligatures became quite common (Johnston 1979 pp.1-3). It is interesting that the idea of using symbols on pottery persisted even though the practice had apparently died out. However, we must be wary of attaching too much significance to this fact. Pottery was so ubiquitous in the Greek world that it would undoubtedly suggest itself as a medium for the new writing. In addition, the alphabet was almost certainly used on more ephemeral materials which have since decayed. However, no historical Greek marks were made before the vessel was fired, so it is impossible to determine by whom they were made (ibid p.5). Some dipinti on Greek-made vessels are in Etruscan, which may indicate that the customer added the mark, unless someone fluent in the client's language was working at the studio (ibid).

There are some pre-firing marks, dipinti made in glaze. It is assumed that these relate to events during the pottery making process. These were later overlaid, presumably once their usefulness was exhausted, by the post-firing marks

(ibid p.48).

It would appear that after the decline in the use of pre-firing incised marks in the Late Helladic, potters in Greece never returned to or re-invented such a system. There were, however, a number of painted marks, some applied prior to firing but most added afterwards. The most common marks were generally a personal name, vase name, adjective describing the vase or a numeral (Johnston 1979 p.43). Most seem to be "commercially" based. Some actually give the price charged or paid for the piece. Others probably name the trader who ordered the vessel--often one "master vase" in a batch to be shipped together would be marked (ibid p.48). In some cases owners added their name to the piece (ibid p.37, e.g.).

The use of even these painted marks died out during the 4th century, but potters' marks were revived during the Roman period (ibid p. 52). Several varieties of Roman pottery bore pre-firing marks, mostly stamps. Amphorae bore the name of the kiln or the owner of the estate which produced its contents (Keppie 1991 p. 114). Mortaria were stamped with the potter's name, and the dies have been found on kiln sites (Swan 1984 p.52). The same potter's name can appear on mortaria, colour coated ware and the fine red Samian or Terra sigillata (ibid p.97). In Britain, the same potter could have kilns in several different places, possibly simultaneously (ibid).

Only a relatively small amount of Roman pottery was

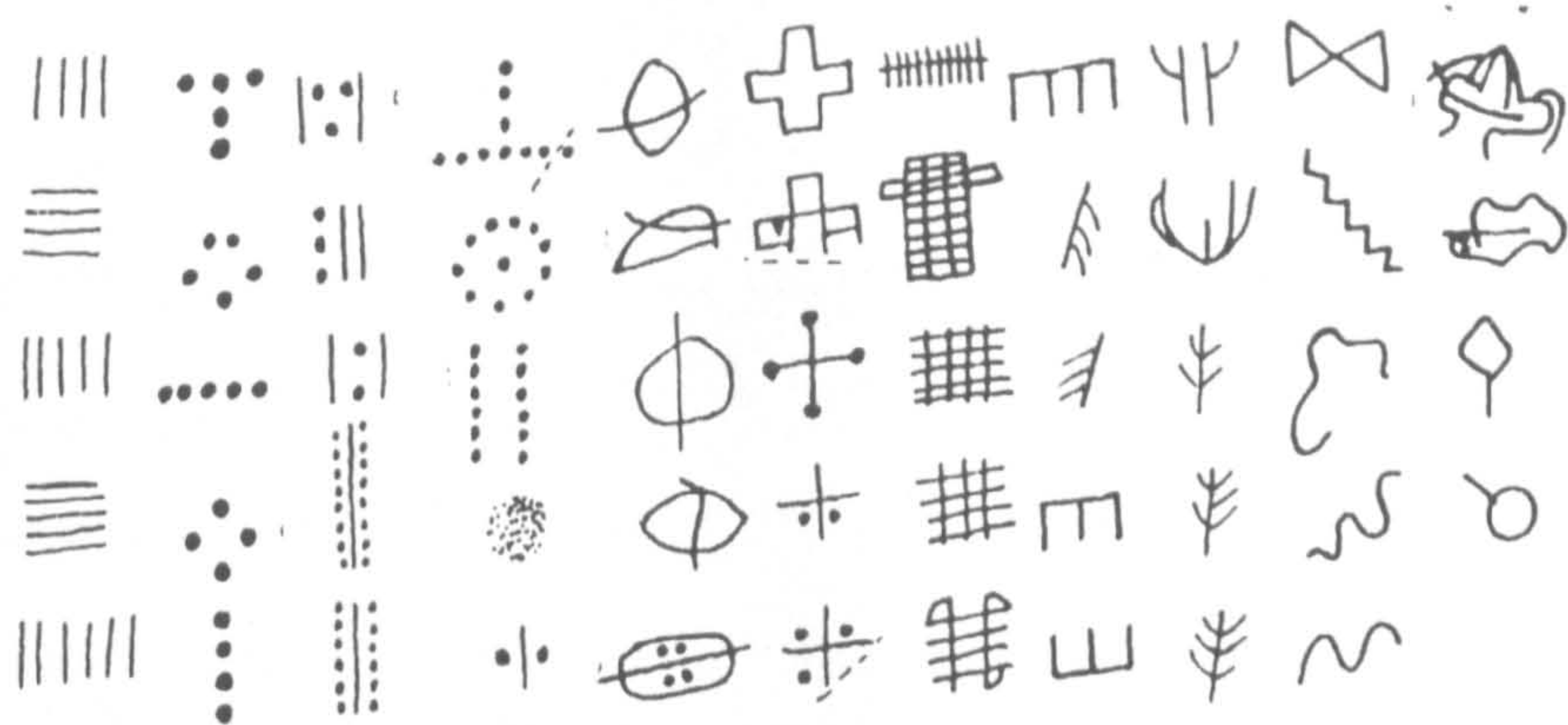
marked, and that was generally destined for trade or export, either for themselves, as with Samian, or their contents, as with the amphorae. It would appear that the manufacturers of either the vessels or their contents were anxious to have their names associated with the product, perhaps to create a "brand name" which would attract and keep customers. It was a thoroughly commercial enterprise.

With the fall of the Roman empire the use of potters' marks lapsed again, and was revived in Europe in the post-mediaeval period after increased trade with the East brought Oriental marks to European attention (Cushion and Honey 1956 p.15. see below p.210). From the 18th century various factories developed distinctive trademarks such as the Meisson crossed swords, and this practice continues today. Sometimes the individual potter or painter added a mark or ligature, and art historians today can on occasion identify the artist who made or painted a vessel, as well as when and where it was produced. Several other types of marks can be found on modern European pottery: workmens' and painters' marks, sometimes scratched into the fabric. These were usually a number, letter or other sign, intended to inform the management about some aspect of the work. Some marks indicated where in the kiln a piece was to be placed. (ibid p.18). Occasionally marks were added which indicated the future owner of the vessel, or dedications to a recipient. Where pieces were decorated specifically to a dealer's order, they could be marked to indicate the

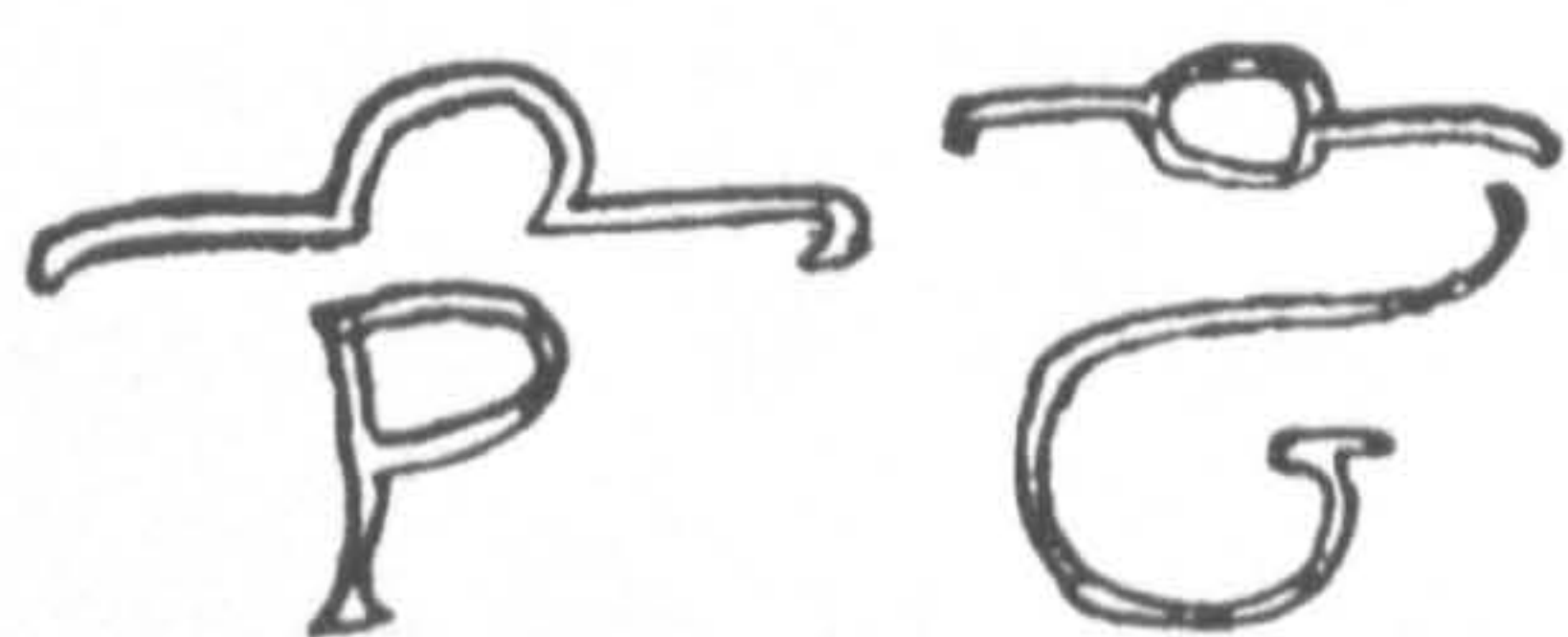
person or firm who commissioned them. In some cases it was actually required to mark the vessels, to reduce the possibility of forgery or if a pattern or style was a registered patent the number would be included (ibid p.19). (See figure 62)

Some of these types of mark, such as the factory trademarks or the patent numbers, are clearly products of a far more complicated industrial society than that of the Bronze Age Aegean, and so have little relevance to our investigation. The painters and workmens' marks, on the other hand, represent a simpler mechanism, devised by and for individual craftsmen, and are therefore of more use to this study. It is interesting that these marks are undoubtedly intended to be useful only during the manufacturing process, rather than in trade.

Among Chinese and Japanese potters different types of marks were used. In imperial China it was common to put a reign mark on the base of the vessel, to indicate that it was made during the lifetime of a certain emperor. This practice started during the Ming dynasty (1368-1643. Hannover 1925 p.32). However, these marks were generally added after firing, which puts them outside the realm we are considering. Pre-firing marks were used, though very rarely, and these are found going back 2000 years and more (ibid). Only some Chinese pottery was marked, of both exceptional and mediocre quality. The rationale behind this is unknown (ibid p.35). Reign marks were often plagiarised, both out of respect for the ancestors of that



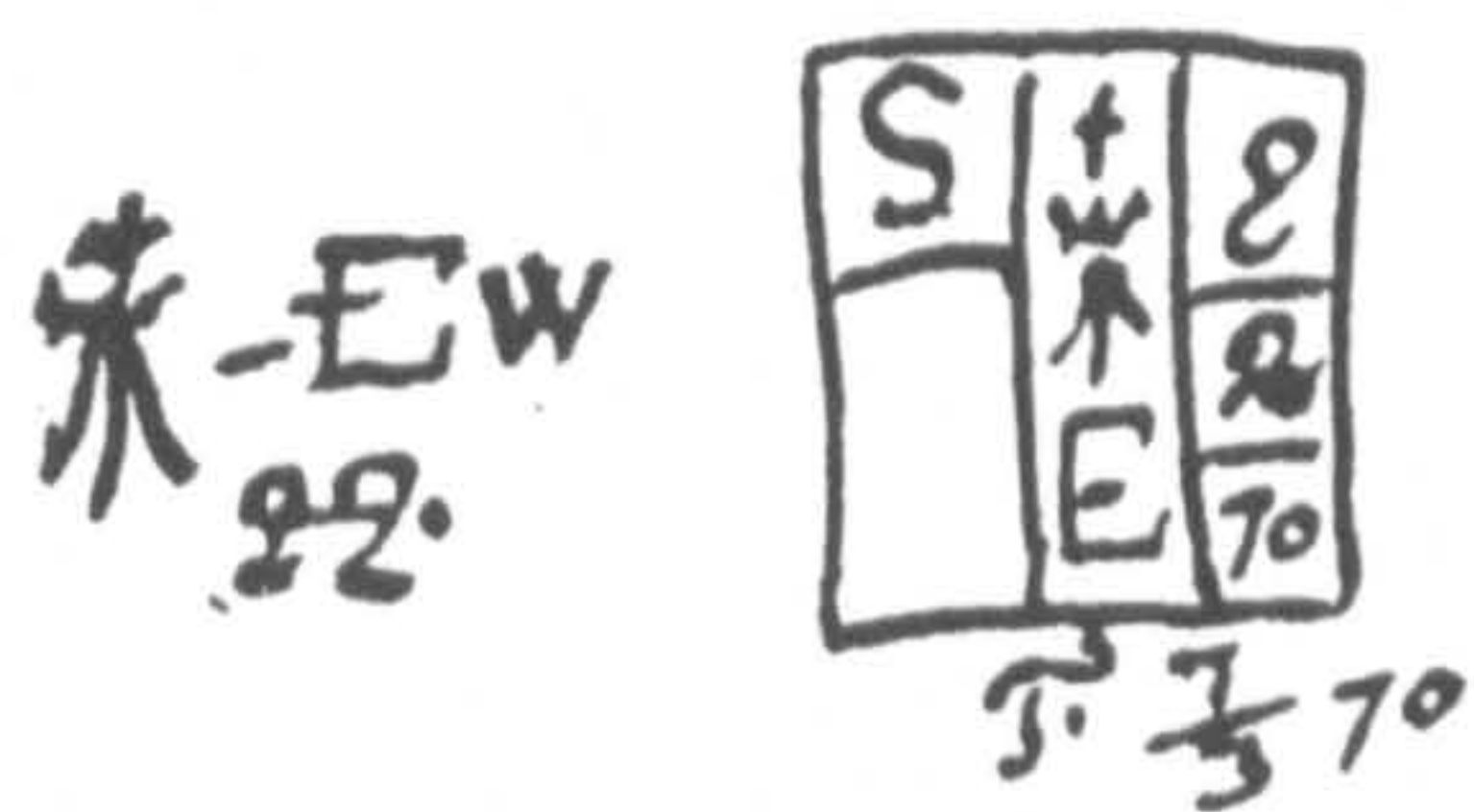
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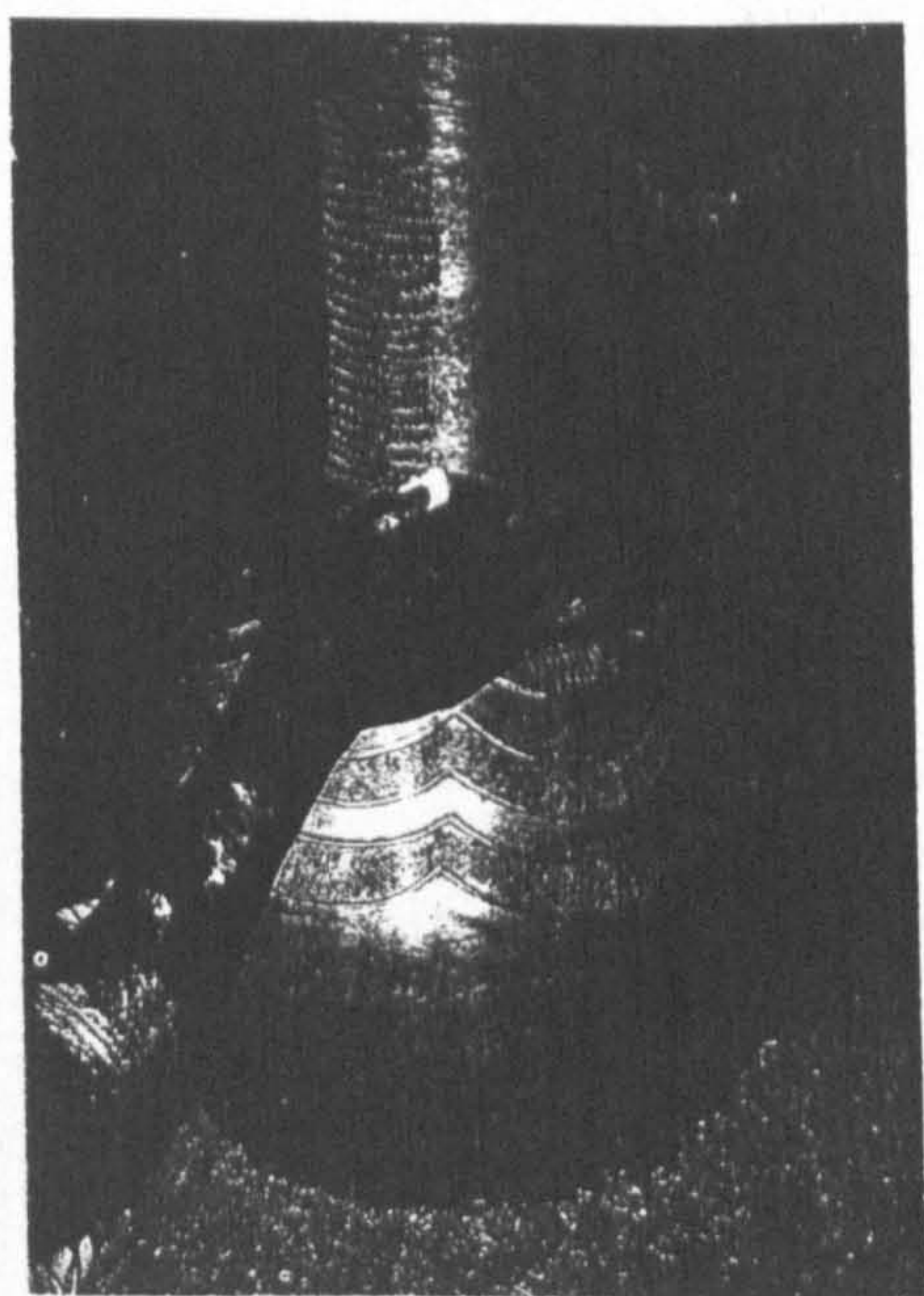
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62. Potters' Marks from a) Tepe Yahya; Europe: b) 15th century ligature, c) 18th century factory mark with initials of proprietor, painter, date etc., d) 19th century destination mark added to pieces ordered by the French king; and e) waterpot decoration and body scarification patterns, Ga'anda people, Nigeria

The pottery industry in Japan was organised rather differently from that in China, and there were many small workshops. It was therefore more common for Japanese potters to sign their work. Reign marks were also used, though very rarely. Just as in China, these could be forged (ibid pp.203-4).

The modern factories of Worcester or Sevres, or even the studios of imperial China, are a far cry from the workshops of the Bronze Age potters. However, some modern pottery is still made and marked in a rather primitive manner more reminiscent of the ancient systems. Among the tribal peoples of Africa much of the pottery is still made in the villages, and some of it is marked. Although there have been a number of ethnographic and anthropological studies of African potters, the use of marks has been examined only cursorily. In Kenya and East Africa the marks are representative of the potter, both to prevent confusion when several potters' pieces are baked in the same kiln, and sometimes to act as a guarantee of quality for the buyer (Barclay 1994 p.128, Lindblom 1920 p.135, Gill 1981 pp.60, 211). In this area, though not elsewhere in Africa, the potters are all women. A girl uses her mother's mark until she marries, then devises her own (Gill 1981 p.60). The marks are often single or multiple rows of irregular impressions (ibid p.218), or they can be more or less complex: the Mukaa use rows of dots, the

Wdueni and Kangundo simple dot and line motifs (ibid p.150). Some marks may look decorative but they are in fact purely utilitarian (ibid p.220). In the Philippines, decorative motifs can actually serve as potters' marks: the number of painted bands helps to identify a potter's output in the communal kiln (Rice 1987 p.183) In some cases it has been suggested that the African marks are related to the patterns of scarification used on the human body (Earthy 1933 p.56, Barley 1994 p.128. See figure 62). Both can mark a person or vessel as "complete" (Barley 1994 p.132). It has been suggested that designs painted on Early Cycladic figurines may also echo body decoration (Barber pers. comm.). If this is true, it makes another link between plastic art and personal decoration, and strengthens the case for this interpretation of at least some potters' marks.

In this context it might be worth mentioning the tremendous weight of social, sexual and mystical symbolism attached to potters and pottery in some African cultures. There are complex rules about who can make pottery, where and when, and whether other members of the community can associate with them; which vessels are used for certain purposes or ceremonies, where they can be stored etc. (See especially Barley 1994 and Gill 1981). Such psychological constraints can have a great effect on the physical objects, but leave no record themselves: it is entirely possible that there were similar rules governing potting in the Bronze Age, especially as pottery was so ubiquitous in daily life. These rules would have a definite effect on

the archaeological record, but would be quite inexplicable by archaeological methods. This frustrating possibility should be borne in mind when considering the pottery and other remains of this or any other society which has not left historical records. It is also possible that the potters' marks had some religious or ritual function, which would be equally difficult to discern.

From this brief review of archaeological, ethnographic and historical evidence, it can be seen that potters' marks have had a number of different uses, sometimes more than one within the same culture. The most common meaning of a mark is the name of the potter or firm which produced the piece. This information is used either as a means of indentifying the vessel in a mixed kiln load or as a trademark for the benefit of the customer. Some marks were intended only for the information of those working in the manufacturing process. Less common are marks indicating date or contents. (It may be useful to mention here a number of Mycenaean stirrup jars with painted Linear B inscriptions which have been found at several Cretan and mainland sites. These inscriptions are generally combinations of place and personal names, presumably indicating the point of origin and "owner"). Finally, a number of marks are of unknown purpose, and may remain impossible to elucidate.

SECTION VIII: CONCLUSION

This survey has brought to light a number of facts about the use of potters' marks in the Bronze age Aegean, and more specifically at Phylakopi, though as usual in these cases it has raised as many questions as it has answered.

To begin with the larger picture: the use of potters' marks seems to begin in the mid to early 3rd millennium BC. It is impossible to say whether they arose as an independent development everywhere or were transmitted from one source. Certainly the marks from Lithares in Boeotia are as early as those from phase A2 at Phylakopi; but our chronology is too coarse to establish any sequence between them. In any case, the EHII marks from Lithares are--so far--an isolated incident as far as the Mainland is concerned.

The use of marks gained strength at Phylakopi during the later EBA, and may have spread from there to Aegina, where a series of oval/round impressions on red polished bowls could be in imitation of similar marks--and indeed a similar fabric--from Phylakopi. Unfortunately, Ayia Irini was deserted throughout this period, so we have no information on the use of marks from one of the few major Cycladic sites so far investigated.

Around the same time, potters' marks began to be found on Minoan sites. They appear to have developed quite independently of those elsewhere and are quite different in style and use. Certainly the use of oval/round impressions

never reached Crete. In some cases the marks are linked to the hieroglyphic script which was also used for other record keeping such as seals and tablets. At Mallia, which has produced the largest corpus of marks so far, the marks are all on local coarse ware pieces. In this case, at least, there is no question of the marking system having any connection with trade.

Potters' marks reached the apex of their popularity during the MBA. At Phylakopi the development of the new types, Cycladic White and Dark Burnished, did not affect the marks, with linear and oval/round marks used on both fabrics. Ayia Irini not only adopted the use of oval/round impressions, but developed its own unique system of fingernail and cut/dent marks. The fingernail impressions may be associated with one particular workshop. On Aegina the potters continued to use oval/round impressions as well as linear, and exported pottery to a number of different mainland sites: coarse ware to Asine with cut/dent and linear marks; coarse ware to Tiryns as well, more often with linear marks, and generally finer ware to Lerna, with linear marks. Both Lerna and Asine produced Lustrous Decorated ware, which may come from Kythera. The two sites seem to have had different tastes, as the Lustrous Decorated from Asine is finer than that from Lerna. Both types, however, had the same linear marks.

On Crete the use of marks disappears towards the end of the MM/beginning of the LM. This may be linked to the

development of Linear A and the rise of the palace bureaucracy, since production or administrative information about the pottery could be now be recorded elsewhere. The linear scripts were however used for quite long inscriptions on some vessels, so the possibility of inscribing information on individual pieces remained.

In the LBA potters' marks continued to be popular at Phylakopi and Ayia Irini, but they seem to die out on the Mainland. This may again be linked with the rise of the palaces. Despite the gradual "Minoanization" of the shape and decoration of Phylakopi pottery, the types of marks continued as before. At Ayia Irini there is a notable dichotomy, with oval/round impressions on pottery imported from the Cyclades and linear from Aegina and the Mainland. By early LHIII, as the mainland palaces began to spread their influence abroad, all marked imports to Ayia Irini came from the mainland, with punched or linear marks. At Phylakopi, as apparently elsewhere, the standard Mycenaean pottery was never marked, though some local pieces still were. By the end of the Mycenaean period few marks can be found from either site, though they seem to linger longest at Phylakopi, perhaps by virtue of the continuing popularity of the shrine.

A number of different hypotheses have been advanced concerning the actual meaning of the marks. As we have seen from the historical and ethnographic evidence, the most common use is to identify the potter, though they have also been used to establish the date or name the owner of

the estate where the contents were produced or to give some information to others involved in the manufacturing process.

Several other possibilities have arisen from our analysis of the Aegean marks: some may indicate a measurement of size or capacity, such as the marks from Ayia Irini which are paralleled on lead weights (above p.160). Others, particularly the more elaborate and highly visible ones, may be labels. The marks on Aeginetan pieces at various Mainland sites suggest that different marks were used on vessels for different destinations (above p.185), or, alternatively, that different potters worked on orders for different places. On Crete, or at least at Mallia, there is some evidence that the marks may indicate the customer (above p.199).

Although all of these explanations cover some of the facts, none of them is adequate for all potters' marks. It is most probable that marks had different purposes and meanings at various places and times, and even that different types found at the same site were used for different reasons.

Finally, we should consider Phylakopi more specifically. We can make a few definite statements, both positive and negative. There is no apparent correlation between the type of mark and the fabric. It is noticeable that most of the marked Dark Burnished pieces are open, and that most

oval/round impressions are on open vessels, so in neither case is the mark likely to refer to contents.

Some linear marks could be regarded as "labels" of some sort, as they are often found in prominently visible positions such as the side and handle--though many of them, particularly on the handles, are simple single lines. Only two pieces have marks which really resemble Linear B symbols: 072, which could be a carelessly drawn WA, and 102, which looks like TI (see figures 22 and 29). However, given the extremely simple nature of many of the marks, and the fact that they were repeated on different types of vessels, it is unlikely that they were used for this purpose.

In the original report, Evans suggested that the single lines and oval/round impressions represented a numerical system (Atkinson et.al. 1904 p.184-85). He does not, however, suggest what was being counted, though earlier Edgar suggests that the marks A1-8 and A14-B5 could record the number of vessels made at a sitting (Atkinson et.al. 1904 p.180).

We did have two discrete groups from which some information may be gained. The first is the panelled cups. 20 specimens from the 1974-77 excavations had marks. These were nearly all on the base, probably indicating that they were not meant to be seen or to impart any information during use (though we must remember the trademarks on modern china, which are always on the base but extremely

important to the collector). A majority were oval/round impressions, in combinations of one, two or three impressions. Two had cut/dent marks, the rest linear. If the mark referred to the size or capacity, one would expect them to be mostly the same. With a cup, of course, the mark would not denote contents.

We find the same problem with the other group, the spouted bowls. 27 of these have been found, all but one from the earlier excavations. (This does not mean that there were none from the 1974-77 excavation, merely that the shape was not identified among the fragmentary material.) About half were marked on the base, the rest on the base and side, low on the side or, in a few cases, on the side itself. All but two of the marks are oval/round impressions, ranging from a single impression to six, in various groupings.

The majority of the spouted bowls were in Dark Burnished ware. Once again, given the general similarity in size, one would expect that any marks relating to capacity would be more uniform, and again the mark on a bowl is unlikely to act as a label of contents. It would appear that, for these two groups at least, the marks have little reference to the vessel itself.

A corpus of over 270 marks is close to the maximum so far found at any Aegean site. However, we must remember that the 1974-77 excavation explored only a few relatively

small areas. A further 175 marks are known from the earlier excavations, which covered more of the site. Given that much of the coarse ware was discarded, and that the fragmentary material in particular was probably not examined in a careful specific search for marks, we can assume that the number of marks should be much higher. So why should Phylakopi have so many more marks than equally well or better explored sites such as Knossos or Lerna? Part of the answer may simply be that it is a quirk of preservation or of observation or interest on the part of the excavators. Another factor is probably the nucleation of settlement during the late EC period. Phylakopi became a fairly large town. Instead of living in small, self-sufficient groups, the people must have developed a network of interdependent goods and services. This would necessitate more organisation in crafts such as ceramics, to reduce confusion. The use of potters' marks could insure that the vessel in question went into the right place in the right kiln, was filled with the right contents or reached the right customer.

At the same time, Phylakopi commanded only the fairly small island of Melos and its "empire" never reached the size or complexity of the centralised palace systems of Crete and the Mainland, which needed a means of record keeping which the linear scripts provided. Therefore the potters' marks (and perhaps notched sticks, or other simple devices used in other crafts) provided all the information Phylakopi needed.

Finally, Phylakopi's position in the Aegean trading networks undoubtedly contributed to the growth of its pottery industry. Melian pottery has been found on Crete and elsewhere, and we have already considered the possibility that the use of oval/round impressions on Aegina came from Melos. If you are exporting large amounts of pottery, either for its own sake or as containers for other products, you will probably need some way to keep track of it.

So there are several reasons why the use of potters' marks developed at Phylakopi. However, given the many thousands of sherds found and the fact that many whole vessels are unmarked, it becomes clear that potters marks were by no means universal. One would expect them to be if there were some overall control of the ceramic industry or some common need for them. We must therefore look for a less comprehensive purpose, or possibly more than one.

Given all the evidence to hand, it seems likely that the Phylakopi marks served different purposes. A lightly drawn line or cross on the base of a vessel sitting upside down with a number of others could serve as a reminder to the potter that it was ready for the kiln, or to tick off the number completed, or to identify it in a mixed kiln load with other potters' work. Three small cuts at the edge of the base could indicate that this was the third of X vessels made that day. The more visible and elaborate marks could be labels, either as the potter's trademark or

to show the contents--though in that case one would expect a more obvious pattern or repetition.

The oval/round impressions have such a specific distribution, and seem to have such a deliberate system of patterns, that I feel they must represent a communication system which we have not yet fathomed. It is most likely that it was intended to be understood only by those working in the pottery industry, or just possibly those "marketing" and shipping it, as the marks are so small and inconspicuous, and are often covered by paint or slip.

Whatever their meaning, the marks continued unaffected by changes in fabric or fashion, by the two destructions of the city, or by the great influx of first Minoan and then Mycenaean culture and influence. This would seem to indicate a continuity of thought and method, and suggest that such stylistic changes in material culture, upon which archaeology is so dependent, and even apparent upheavals in administration or government need not in fact indicate great cultural changes for the majority of people concerned.

Unfortunately, all of this must remain speculation until further research expands the corpus of Aegean marks and, we hope, gives us a greater insight into the use of potters' marks. However, despite the patchiness of our information, the potters marks of Phylakopi remain, in Mackenzie's words, "the first simple use of conventional signs to express an intelligible meaning" (Atkinson et.al. 1904

p.254), and as such are worthy of our continued study and consideration.

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PHYLAKOPI 1974-77 CATALOGUE OF POTTERS' MARKS

PHASE A:

001 piC 132 928. phi 75 ECI/II
Vessel Type:plate? import?
Ware:fine,gray, surface lt. orange streaky slip
Location:side
Mark:arrow
Notes:EBA sherds box 1. phase A

002 piC 130. no label on bag ECI/II
Vessel Type:base import?
Ware:fine, lt. gray, ext. buff, plain
Location:edge of base
Mark:1 cut
Notes:box 102

003 piC 129 924. phi 75 ECI/II
Vessel Type:sherd import?
Ware:fine,plain, gray, surfaces buff
Location:side
Mark:X
Notes:EBA sherds box 1. phase A

004 piC 126 ECI/II
Vessel Type:sherd import?
Ware:med.,dark-gray core,yellow buff surfaces
Location:side
Mark:V. incomplete. ?decorative
Notes:

005 piC 125. phi 75 ECI/II
Vessel Type:sherd import?
Ware:med. dk. gray, surfaces lt. buff
Location:side
Mark:parts of 2 lines forming X? Incomplete
Notes:phase A

PHASE B:

006 piB 34 pb337. phi 74 ECII/IIIB
Vessel Type:body sherd.closed
Ware:med.fine,gray-buff,gray slip
Location:side
Mark:2 almost parallel lines. ?decorative
Notes:

007 piC 123. phi 75 ECII/IIIB
Vessel Type:base
Ware:fairly coarse, buff, smoothed
Location:base
Mark:2 lines at right angles. incomplete
Notes:EBA sherds box 2

008 piC 114 903 below 113. phi 75 ECII/IIIB
Vessel Type:open base
Ware:Cyc. white? med.fine, gray buff, smoothed
Location:base
Mark:2 oval impressions
Notes:

009 piC 112 549 below 111. phi 75 ECII/IIIB
Vessel Type:?rim
Ware:med.,red-brown,gray exterior
Location:side
Mark:V above pierced hole. incomplete. ?real mark
Notes:

010 piC 111 548. phi 75 ECII/IIIB
Vessel Type:base.open?
Ware:fine,lt.gray, surfaces buff
Location:base
Mark:2 short incisions, trace of 3rd. incomplete
Notes:phase B

011 piC 109 546 feature 4. phi 75 ECII/IIIB
Vessel Type:base import??
Ware:plain,fine, reddish, ext. pale yellow slip
Location:base
Mark:V
Notes:EBA sherds box 1. phase B

012 piC 108 545. phi 75 ECII/IIIB
Vessel Type:sherd
Ware:med.fine, reddish, ext. gray slip
Location:side
Mark:double chevron. incomplete
Notes:box 96

013 piC 106 542 below 105. phi 75 ECII/IIIB
Vessel Type:base import??
Ware:fine,gray, int. and ext. red-brown slip
Location:base
Mark:2 parallel lines, 1 long, 1 short
Notes:EBA sherds box 1. phase B

014 piC 105,106,111-116. phi 75 ECII/IIIB
Vessel Type:collared jar
Ware:med.,brick red
Location:side
Mark:arrow
Notes:

015 piC 100 536. phi 75 ECII/III
Vessel Type:base import??
Ware:plain. med.fine,gray,buff ext.,reddish int.
Location:base and low on side
Mark:4 oval impressions forming double chevron
Notes:EBA sherds box 1

016 piC 103. phi 75 ECII/IIIB
Vessel Type:base
Ware:fine, gray, lt. red burnished
Location:base
Mark:1 line,incomplete
Notes:EBA sherds box 1

017 piC 103 539 below 99. phi 75 ECII/IIIB
Vessel Type:handle or jug lip?

Ware:med.,lt.gray, surfaces reddish, ?slip
Location:handle
Mark:1 line
Notes:box 97

018 PiC 103 539 below 99. phi 75 ECII/IIIB
Vessel Type:base.open
Ware:med.fine,reddish,ext.buff,int. dark brown
Location:base and low on side
Mark:2 lines in arrowhead. incomplete
Notes:box 97

019 piC 103 539 below 99. phi 75 ECII/IIIB
Vessel Type:base
Ware:Cyc. white? fine, buff, dark brown MP
Location:base
Mark:3 fingernail marks
Notes:box 97

020 pic 99 535. phi 75 ECII/IIIB
Vessel Type:jug import??
Ware:EMP B
Location:neck
Mark:2 pairs of 2 oblique opposed lines. incomplete
Notes:EBA sherds box 1

021 pic 99 534. phi 75 ECII/IIIB
Vessel Type:base import??
Ware:plain,fine, gray. ext.lighter, int.reddish
Location:base
Mark:3 lines in zig-zag. incomplete
Notes:EBA sherds box 1. phase B

022 pic 89 523. assoc. w/feature 2. phi 75 ECII/IIIB
Vessel Type:base.open
Ware:med.fine,gray buff, ext.slipped gray, int.brown
Location:low on side
Mark:1 round impression.incomplete
Notes:box 98

023 piE 39 560. phi 75 ECII/IIIB
Vessel Type:jar
Ware:coarse, red, hard, thin
Location:handle
Mark:Y
Notes:

024 piE 30 582 below 29. phi 75 ECII/IIIB
Vessel Type:sherd
Ware:fine,buff
Location:side
Mark:dotted triangle. incomplete. ?decorative
Notes:

025 piE 21 pb 572 under 20. phi 75 ECII/IIIB
Vessel Type:body sherd
Ware:fine,gray, hard fired
Location:side
Mark:inverted V. incomplete

Notes:

026 piE 21 572. phi 75 ECII/IIIB
Vessel Type:lg. jar?
Ware:EMP.med.fine,dk.gray,int.orange,ext.buff.gray slip
Location:handle
Mark:double chevron
Notes:storeroom shelves. phase B

027 piE 29 581 below 28. phi 75 ECII/IIIB
Vessel Type:sherds
Ware:fine,buff
Location:side
Mark:dotted ?triangle. ?decorative
Notes:

028 piE 18. ECII/IIIB
Vessel Type:panelled cup?
Ware:Cyc.white? fine,white,dk.brn. MP, red-brn.lustrous
Location:base
Mark:2 short cuts
Notes:Cycladic White box

029 piE 18 570. phi 75 ECII/IIIB
Vessel Type:base
Ware:Cyc. white. med.fine,pink-buff
Location:base
Mark:3 oval impressions
Notes:

030 piE 18 568. phi 75 ECII/IIIB
Vessel Type:handle. ?jug import??
Ware:med.fine, gray, surface red. white & orange MP
Location:handle
Mark:2 short parallel incisions
Notes:phase B

PHASE C:

031 piA 93 987. phi 75 MC
Vessel Type:base
Ware:med.,red-brown,?cream slip
Location:low on side
Mark:3 round impressions
Notes:

032 piA 93 987. phi 75 MC
Vessel Type:?base.open
Ware:med.fine,gray-buff,int.brown-red,ext.gray
Location:base
Mark:2 fingernail marks
Notes:

033 piA 93 987. phi 75 MC
Vessel Type:shallow cup
Ware:med.fine,buff,red slip
Location:base
Mark:2 round impressions
Notes:

034 piA 93 987. phi 75 MC
Vessel Type:body sherd.closed
Ware:med.,red-brown,white and dk.brown-gray paint
Location:side
Mark:double axe
Notes:

035 piA 93 987. phi 75 MC
Vessel Type:base
Ware:med.,gray core, ext.pink-buff
Location:base low on side
Mark:1 round impression 2 round impressions
Notes:

036 piA 86 975. phi 75 MC
Vessel Type:base.open
Ware:med.fine,red-buff,int.orange-red,ext.red-brn-gray
Location:base
Mark:1 oval impression
Notes:

037 piC 72 503, 71,73. phi 75 MC
Vessel Type:incurved bowl
Ware:Dark Burnished. med.fine, gray-buff
Location:side
Mark:vertical line between 2 impressed circles
Notes:?real mark. MC pot, dark burnished box

038 piC 72 503 continues 502. phi 75 MC
Vessel Type:panelled cup?
Ware:Cyc. white. fine
Location:base
Mark:curved X
Notes:box 99

039 piC 71 501. phi 75 MC
Vessel Type:cup or jug?
Ware:med.fine, lt. brown, int.& ext. dk. burnished
Location:base
Mark:1 incomplete line. ?real mark
Notes:box 99

040 piC 71 501. phi 75 MC
Vessel Type:cup or jug
Ware:Cyc. white. fine
Location:low on side
Mark:1 line, pt. of 2nd at acute angle. circle at end
Notes:box 99

041 piC 69 498 continues 497. phi 75 MC
Vessel Type:base
Ware:med.fine, gray, surfaces pinkish buff,plain
Location:base
Mark:1 round impression. incomplete
Notes:box 100

042 piC 69 497.below 68 ?=64. phi 75 MC
Vessel Type:base.open
Ware:Dark burnished.med.fine,gray-buff.

Location:base
Mark:2 cuts
Notes:box 100

043 piC 68 496 =63. phi 75 MC
Vessel Type:panelled cup?
Ware:Cyc. White. med. fine
Location:base
Mark:3 impressed circles
Notes:box 100. phase C

044 piC 65 493 =61. phi 75 MC
Vessel Type:base
Ware:Cyc. white. fine
Location:base
Mark:2 parallel cuts
Notes:box 101. phase C

045 piC 65 493 =61. phi 75 MC
Vessel Type:base
Ware:med. fine, buff, plain
Location:base
Mark:part of 1 line
Notes:box 101

046 piC 65 493 =61. phi 75 MC
Vessel Type:panelled cup
Ware:Cyc. white. fine
Location:low on side
Mark:1 round impression
Notes:box 101

047 piC 65 493 =61. phi 75 MC
Vessel Type:sherd
Ware:med.,red-brown, thin white paint
Location:side
Mark:1 line. incomplete. ?real mark
Notes:box 101. phase C

048 piC 63 491 E of 61 & 62 in N area.phi75 MC
Vessel Type:sherd
Ware:med. fine, gray, thin white paint
Location:side
Mark:1 line. incomplete. ?real mark
Notes:box 101

049 piC 60 488. phi 75 MC
Vessel Type:?neck
Ware:EMP.fine, reddish, white MP
Location:neck
Mark:double chevron
Notes:phase C

050 piC 60 488 in W of trench. phi 75 MC
Vessel Type:sherd
Ware:fine, buff, plain
Location:side
Mark:1 round impression
Notes:box 101. phase C

051 piC 59 486. phi 75 MC
Vessel Type:sherd
Ware:med.coarse,dk.gray.int.dk. buff.smoothed
Location:side
Mark:1 line. incomplete. ?real mark
Notes:box 90

052 piC 59 486 . phi 75 MC
Vessel Type:sherd
Ware:fine, pinkish buff, ?plain
Location:side
Mark:2 round impressions
Notes:box 90

053 piC 67 495. phi 75 MC
Vessel Type:base
Ware:Cyc. white. med fine
Location:base
Mark:2 lines at right angle. cross? incomplete
Notes:box 100. phase C

054 piC 67 495. phi 75 MC
Vessel Type:base
Ware:Cyc. white, med. fine.
Location:base
Mark:2 lines at acute angle. incomplete
Notes:box 100. phase C

055 piC 67 495. phi 75 MC
Vessel Type:jug or amphora?
Ware:Cyc. white. fine
Location:base
Mark:4 lines forming parallelogram.2 sides extended
Notes:box 100.phase C

056 piC 67 495. phi 75 MC
Vessel Type:panelled cup?
Ware:Cyc.white?med.fine,gray,ext.white, dk. brown MP
Location:base
Mark:1 round impression
Notes:box 100

057 piC 58 485. phi 75 MC
Vessel Type:base. large vessel
Ware:med.coarse,reddish/gray,surfaces lt. buff
Location:base
Mark:1 line. incomplete
Notes:box 91

058 piC 57 484. phi 75 MC
Vessel Type:sherd
Ware:med. coarse, red-brown
Location:side
Mark:2 parallel lines. ? decorative
Notes:box 92

059 piC 57 484 continues 483. phi 75 MC
Vessel Type:shallow bowl?

Ware:Cyc. white. fine, buff, white slip, dk. brown MP
Location:low on side
Mark:1 round impression
Notes:box 92

060 piC 57 484 continues 483. phi 75 MC
Vessel Type:jug?
Ware:med.coarse, lt.gray, surfaces buff, dk. brown MP
Location:base
Mark:2 cuts or fingernail marks
Notes:box 92

061 piC 57 483. phi 75 MC
Vessel Type:shallow bowl?
Ware:Cyc. white. fine, buff, dk. brown MP
Location:base
Mark:1 oval impression, part of another
Notes:box 92

062 piC 57 483 . phi 75 MC
Vessel Type:panelled cup?
Ware:Cyc. white. fine
Location:base
Mark:2 oval impressions
Notes:box 91

063 piC 56 482. phi 75 MC
Vessel Type:base.closed?
Ware:coarse Cyc. white? med., white, dk. brown MP
Location:base
Mark:1 round impression
Notes:box 93

064 piC 56 482. phi 75 MC
Vessel Type:Cyc. bowl?
Ware:Dark burnished. med.fine, buff.
Location:base
Mark:1 round impression
Notes:box 93

065 piC 56 482. phi 75 MC
Vessel Type:jug?
Ware:Cyc. white? fine, buff, plain
Location:base
Mark:1 round impression
Notes:box 93

066 piE 7 356 fl.11 557 MC
Vessel Type:beaked jug
Ware:med.coarse, red-buff, white and dark inclusions
Location:base
Mark:2 sets of 3 round impressions
Notes:

067 piE 7 557. phi 75 MC
Vessel Type:jug?
Ware:Cyc.white. med.fine.
Location:base side
Mark:2 oval impressions 1 oval impression.incomplete?

Notes:

068 piE 4 pb554 below 3. phi 75 MC
Vessel Type:flower pot?
Ware:Cyc white?
Location:base
Mark:2 oval impressions
Notes:

069 piD I 20 pb 418. phi 74 MC
Vessel Type:closed base
Ware:med.,gray-buff,surfaces buff
Location:base
Mark:3 round impressions
Notes:

070 piD I 31 pb 429. phi 74 MC
Vessel Type:barrel jar?
Ware:med. brown, grey core, dk.gray surface
Location:handle
Mark:3 horizontal lines
Notes:

071 piDI 13 411. phi 74 MC
Vessel Type:plate/jug/jar??
Ware:Cyc. White. fine
Location:base
Mark:1 fingernail impression. ?real mark
Notes:Cycladic White box

072 piS 25 936. phi75 MC
Vessel Type:jar
Ware:med.,pinkish, white slipped
Location:shoulder
Mark:? Lin B house sign
Notes:phase C

073 piS 25 936 under 24. phi 75 MC
Vessel Type:base.plate? import?
Ware:med.fine, red brown
Location:base
Mark:1 oval impression
Notes:

074 piS 25 936 under 24. phi 75 MC
Vessel Type:panelled cup?
Ware:Cyc. white
Location:base
Mark:2 parallel cuts
Notes:

075 piS 26 937 under 24 935. phi 75 MC
Vessel Type:sherd
Ware:Cyc.white?
Location:side
Mark:2 parallel lines,part of third at angle.real mark?
Notes:

076 piS 26 937 under 24 935. phi 75 MC

Vessel Type:base
Ware:Cyc. white
Location:base
Mark:uneven cross
Notes:

077 PLa 111 675 phi 75 MC
Vessel Type:sherd
Ware:coarse, orange.gray/cream core.int.gray,ext.brown
Location:side
Mark:incomplete ?fish. decorative?
Notes:

078 PLa 111 765. phi 75 MC
Vessel Type:base.open
Ware:Dark burnished. med. fine, pink-buff?
Location:base
Mark:V
Notes:

079 PLa 111 765. phi 75 MC
Vessel Type:amphora/barrel jar
Ware:coarse, reddish, lt. gray slip, brown MP
Location:handle
Mark:1 short line. ?real mark
Notes:phase C

080 PLa 111 765. phi 75 MC
Vessel Type:amphora/barrel jar
Ware:coarse, reddish, self slip
Location:handle
Mark:1 line ?real mark
Notes:phase C

081 PLa 109 762. phi 75 MC
Vessel Type:body sherd.closed
Ware:med.,lt. brick red
Location:side
Mark:long X
Notes:

082 PLa 109 762. phi 75 MC
Vessel Type:body sherd
Ware:med.fine,red-buff,ext.gray
Location:side
Mark:part of 3 sides of ?square.incomplete
Notes:

083 PLa 109 761 phi 75 MC
Vessel Type:jug?
Ware:LL.fine, buff, dk. brown paint
Location:side, below handle
Mark:2 horizontal lines, impressed circle at each end
Notes:

084 PLa 110 763 phi 75 MC
Vessel Type:handle
Ware:coarse, red.gray core, white and gray inclusions
Location:handle

Mark:incomplete. probably double W

Notes:

085 PLa 108 760. phi 75 MC

Vessel Type:base.open

Ware:Cyc. white

Location:base

Mark:cross. incomplete

Notes:

086 PLa 108 759. phi 75 MC

Vessel Type:base.?closed

Ware:med.coarse,red-brown, ext. smoothed

Location:base

Mark:V with round impression at point. incomplete

Notes:

087 PLa 108 755. phi 75 MC

Vessel Type:base

Ware:med.fine,gray-buff,surfaces orange buff

Location:base

Mark:3 short vert. lines over horiz. ?real mark

Notes:

088 PLa 108 755. phi 74 MC

Vessel Type:horiz. handle

Ware:med. fine,reddish, ext. gray, white MP

Location:handle

Mark:double chevron

Notes:phase C

089 PLa 108 754. phi 75 MC

Vessel Type:base.open

Ware:med.,brown-buff, int. white

Location:low on side

Mark:1 round impression, part of second?

Notes:

090 PLa 107 753. phi 75 MC

Vessel Type:jug

Ware:Cyc. white

Location:base

Mark:X

Notes:

091 PLa 90 728. phi 75 MC

Vessel Type:base

Ware:med., lt. gray, surfaces pinkish buff

Location:base

Mark:X

Notes:

092 PLa 90 728. phi 75 MC

Vessel Type:2 sherds.closed

Ware:med.,gray.dk. brown and white MP

Location:side

Mark:part of a line on each sherd

Notes:

093 PLa 90 728. MC
 Vessel Type:panelled cup
 Ware:Cycladic White
 Location:side
 Mark:3 round impressions. very faint
 Notes:Cycladic White box

094 PLa 90 728 MC
 Vessel Type:shallow bowl
 Ware:Later Local.fine,gray-buff,?slip.dk.brn.MP
 Location:base low on side
 Mark:1 round impression 2 round impressions
 Notes:MC pot box 1

095 Pla 88 726 under 85. phi 75 MC
 Vessel Type:jug
 Ware:Cyc. white.thick,pink-buff,ext.buff,dk.brown paint
 Location:base low on side
 Mark:1 round impression 1 round impression
 Notes:

096 PLa 85 724. MC
 Vessel Type:panelled cup
 Ware:Cyc. white. fine
 Location:base
 Mark:1 round impression
 Notes:Cycladic White box

097 PLa 85 723. phi 75 MC
 Vessel Type:jug?
 Ware:Cyc. white. red interior
 Location:base
 Mark:2 fingernail marks
 Notes:

098 PLa 85 723. phi 75 MC
 Vessel Type:base.open
 Ware:med.fine,gray,int.and ext. dk.gray slip
 Location:base
 Mark:1 line
 Notes:

099 PLa 85 723. phi 75 MC
 Vessel Type:base
 Ware:thick,med.,red-brown. ext. smoothed
 Location:low on side
 Mark:4 oval impressions
 Notes:

100 PLa 85 722 cont.721. phi 75 MC
 Vessel Type:handle
 Ware:med.,orange-red
 Location:handle
 Mark:applied boss with cross
 Notes:

101 PLa 85 722 cont. 721. phi 75 MC
 Vessel Type:conical cup?
 Ware:Cyc. white? med.fine, buff, plain

Location:low on side
Mark:1 round impression, part of vertical line
Notes:

102 PLa 85 721. phi 75 MC
Vessel Type:bowl?
Ware:med. coarse, reddish
Location:side
Mark:slightly curved arrow
Notes:phase C

103 PLa 85 720. phi 75 MC
Vessel Type:base.open
Ware:Dark burnished. med.fine, ?gray,dk.gray-brown slip
Location:base
Mark:2 parallel nicks
Notes:

104 PLa 85 719. phi 75 MC
Vessel Type:body sherd.?open
Ware:med.,lt.brick red, int. lt. brown,ext.gray
Location:side
Mark:X? incomplete
Notes:

105 PLa 105 749. phi 75 MC
Vessel Type:base
Ware:med.,gray core, lt. orange red exterior
Location:low on side
Mark:1 round impression
Notes:

106 PLa 105 749. phi 75 MC
Vessel Type:body sherd
Ware:med.fine,gray-buff,surfaces pinkish
Location:side
Mark:1 line. incomplete. ?real
Notes:

107 PLa 105 749. phi 75 MC
Vessel Type:handle
Ware:med. fine, brick red
Location:handle
Mark:3 vert.lines in column
Notes:

108 PLa 105 749. phi 75 MC
Vessel Type:base.closed
Ware:med.coarse, thick,gray
Location:low on side
Mark:1 round impression
Notes:

109 PLa 105 749. phi 75 MC
Vessel Type:body sherd.?closed
Ware:med.fine, orange buff
Location:side
Mark:2 parallel lines crossed by diagonal.incomplete
Notes:

110 piS 28 939. phi 75 MC
Vessel Type:rim
Ware:fairly coarse, gray, lt. red-brown wash
Location:side
Mark:2 lines at very acute angle. incomplete
Notes:phase C

111 piS 24. phi 75 MC
Vessel Type:sherd
Ware:med.fine,reddish,int.gray,ext.brown,lt.brown MP?
Location:side
Mark:parts of 3 lines. incomplete
Notes:

112 piS 24 935 under 23 934 floor 2. phi75 MC
Vessel Type:base
Ware:med.coarse,red-brown,core dk.gray-brown.soft
Location:base
Mark:1 round impression, ? part of second
Notes:

113 piS 24 935 under 23 934 floor 2. phi75 MC
Vessel Type:bowl base
Ware:Dark burnished
Location:base
Mark:1 round impression
Notes:

114 piS 24 935 under 23 934 floor 2. phi75 MC
Vessel Type:open sherd
Ware:Dark burnished
Location:side
Mark:2 round impressions
Notes:

PHASE D:

115 piS 29 941.phi 75. Pillar crypt LCI
Vessel Type:coarse cup base
Ware:med.coarse,gray,ext.brick red,surfaces lt.brown
Location:base
Mark:2 lines
Notes:

116 piS 21 931 under 19 pit. phi 75 LCI
Vessel Type:handle
Ware:med.,red buff, core gray
Location:handle
Mark:1 deep wide line
Notes:

117 piS 17 925. LCI
Vessel Type:panelled cup
Ware:fine, buff, plain
Location:base
Mark:2 round impressions
Notes:LBI pot box 4

118 piS 17 924. LCI

Vessel Type:panelled cup
Ware:fine, lt. buff, brown and dk. brown MP
Location:base
Mark:2 oval impressions
Notes:LBI pot box 4. phase D

119 piA 90 982. phi 75 LCI
Vessel Type:shallow cup
Ware:Dark burnished. med.fine, grey-buff, brown slip
Location:base
Mark:3 small round impressions
Notes:

120 piA 85 973. phi 75 LCI
Vessel Type:base.?cup
Ware:Cyc. white
Location:base
Mark:3 round impressions
Notes:

121 piA 35 pb 247. phi 74 LCI
Vessel Type:?base.open
Ware:Dark burnished
Location:low on side
Mark:2 round impressions
Notes:

122 piA 35 pb 244. phi 74 LCI
Vessel Type:horiz. handle
Ware:med., red-brown. ext. dark gray
Location:handle
Mark:2 lines at acute angle
Notes:

123 piA 84 272=floor 5. phi 75 LCI
Vessel Type:base.open
Ware:med., gray, surfaces lt. brown, burnished
Location:base low on side
Mark:1 round impression part of a round impression
Notes:

124 piA 81 996. phi 75 LCI
Vessel Type:body sherd
Ware:Dark burnished
Location:side
Mark:1 round impression
Notes:

125 piA 72. LCI
Vessel Type:spouted bowl
Ware:Dark burnished. med. fine, gray.
Location:base
Mark:2 round impressions
Notes:LBI pot box 4

126 piA 38 pb 250. phi 74 LCI
Vessel Type:base.?closed
Ware:med., pink-brown, ext. smoothed, ?burnt

Location:base
Mark:2 round impressions
Notes:

127 piA 34 66 pb 243. phi 74 LCI
Vessel Type:sherd
Ware:med.buff, int. reddish
Location:side
Mark:2 slightly curved lines at acute angle
Notes:

128 piA 33 pb 242. phi 74 LCI
Vessel Type:base
Ware:thick,med.coarse,brown, ext. ?slip
Location:base
Mark:1 oval impression
Notes:

129 piA 33 pb 242. phi 74 LCI
Vessel Type:base.pierced
Ware:fine,cream. ?Cyc white, plain
Location:base
Mark:2 round impressions
Notes:

130 piA 33 pb 242. phi 74 LCI
Vessel Type:base.bowl
Ware:Dark burnished, med.fine,pink-buff
Location:low on side
Mark:2 small round impressions
Notes:

131 piC 50 476. phi 74 LCI
Vessel Type:handle import??
Ware:EMP.med.fine,gray,red-brown core, brown MP
Location:handle
Mark:2 sets of 2 short parallel lines
Notes:phase C

132 piC 50 476. phi 74 LCI
Vessel Type:base
Ware:med.coarse,lt.red-brown,ext.smoothed or slipped
Location:base
Mark:2 round impressions
Notes:box 94

133 pi C 44. LCI
Vessel Type:cup or jug
Ware:fine, lt. buff, brown MP
Location:base
Mark:uneven cross. very faint
Notes:LBI pot box 4. phase D

134 piDI 15 413. phi 74 LCI
Vessel Type:base.open
Ware:med.coarse, reddish, smoothed or slipped
Location:base
Mark:3 oval impressions
Notes:

135 piDI 15 413,18 416. phi 75 LCI
Vessel Type:Cycladic cup
Ware:Dark Burnished. med.,gray, buff surfaces
Location:base side
Mark:1 oval impression 2 oval impressions
Notes:MC pot, dark burnished box

136 piD1 15 . phi 74 LCI
Vessel Type:base.open
Ware:med.coarse,gray.buff surface.int. brown MP
Location:base
Mark:2 round impressions
Notes:phase C

137 piD I 15 pb 413. phi 74 LCI
Vessel Type:base
Ware:Cyc. white
Location:base
Mark:3 oval impressions
Notes:

138 piD I 18 pb 416. phi 74 LCI
Vessel Type:jug?
Ware:Cyc. white
Location:base
Mark:1 round impression
Notes:

139 piD I 18 pb 416. phi 74 LCI
Vessel Type:?closed base
Ware:med.fine,brick red,surface orange-buff
Location:low on side
Mark:1 round impression
Notes:

140 KKd 44 2104. phi 76 LCI
Vessel Type:shallow bowl
Ware:LL? med.fine,gray core,red biscuit,gray/cream slip
Location:base
Mark:3 small round impressions
Notes:

141 KKd 42 2702. phi 76 LCI
Vessel Type:base.closed
Ware:Cyc. white
Location:base
Mark:2 round impressions
Notes:

142 KKd 40. phi 76 LCI
Vessel Type:panelled cup
Ware:Red and Black.fine, white, brown and lt. brown MP
Location:base
Mark:2 round impressions
Notes:phase D. LBI pot box 2

143 KKd 40. LCI
Vessel Type:panelled cup

Ware: fine, buff, dk. brown MP. red-brown stripe on base
 Location: base
 Mark: X
 Notes: LBI pot box 4. phase D

144 KKd 38. phi 76 LCI
 Vessel Type: flaring bowl
 Ware: Cyc. white. coarse
 Location: base
 Mark: 2 "poked" in, roughly circular marks. ?real mark
 Notes: LBI pot box 3

145 KKd 38 2098. phi 76 LCI
 Vessel Type: bowl
 Ware: Dark burnished
 Location: base
 Mark: 2 round impressions
 Notes:

146 KKd 38 2098. phi 76 LCI
 Vessel Type: bowl
 Ware: Dark burnished
 Location: base
 Mark: 1 oval impression, ?part of another
 Notes:

147 KKd 37 2097. phi 76 LCI
 Vessel Type: open base. ?bowl
 Ware: Cyc. white. coarse
 Location: low on side
 Mark: 2 round impressions
 Notes:

148 KKd 36 2096. phi 76 LCI
 Vessel Type: jug or panelled cup
 Ware: Cyc. white or LL
 Location: base
 Mark: 2 round impressions
 Notes:

149 KKd 34 2094. phi 76 LCI
 Vessel Type: jug?
 Ware: Cyc. white or LL
 Location: base
 Mark: 1 round impression
 Notes:

150 PK 33. phi 75 LCI
 Vessel Type: neck
 Ware: med., pinkish buff
 Location: neck
 Mark: 1 wide slash. ?real mark
 Notes:

151 PK 33. phi 75 LCI
 Vessel Type: handle
 Ware: med., gray-buff
 Location: handle
 Mark: 1 deeply cut line. incomplete

Notes:

152 PK 33. LCI
Vessel Type:Cycladic cup
Ware:Dark burnished.med.,red-brown.
Location:base
Mark:3 round impressions
Notes:LBI pot box 3. phase D

153 PK 29 848 under 847. phi 75 LCI
Vessel Type:panelled cup?
Ware:Cyc. white
Location:base
Mark:2 round impressions. v. worn
Notes:

154 PK 29 848 under 847. phi 75 LCI
Vessel Type:panelled cup
Ware:Cyc.white? med.fine, pale buff
Location:base
Mark:3 round impressions
Notes:

155 PK 27 846. LCI
Vessel Type:base
Ware:fine, plain,lt. orange-red
Location:edge of base
Mark:3 cuts
Notes:LBI pot box 5

156 PK 27 846,under 845 toE. phi 75 LCI
Vessel Type:sherd
Ware:med.coarse,gray core,red-brown biscuit
Location:side
Mark:2 round impressions
Notes:

157 Pla 104 746. phi 75 LCI+
Vessel Type:base.open
Ware:Cyc. white or LL. red interior
Location:base
Mark:1 oval impression
Notes:

158 PLa 104 747. LCI
Vessel Type:bowl?
Ware:Dark burnished.med.fine,gray-buff
Location:low on side
Mark:2 round impressions, 1 oval
Notes:LBI pot box 5. phase D

159 Pla 77. LCI
Vessel Type:conical cup
Ware:fine, buff, plain
Location:base
Mark:3 oval impressions. very faint
Notes:LBI pot box 5

160 Pla 77 99. phi 75 LCI

Vessel Type:body sherd
Ware:med. coarse,pinkish buff, lt. gray slip
Location:side
Mark:2 crossed lines. ?incomplete. ?real mark
Notes:LBI pot box 2. phase D

161 PLa 77 96. LCI
Vessel Type:panelled cup
Ware:fine, white, dk. brown MP
Location:base
Mark:2 cuts. ?real mark
Notes:LBI pot box 3. phase D

162 PLa 77 96. LCI
Vessel Type:panelled cup
Ware:Cyc. white
Location:base
Mark:2 round impressions, touching
Notes:LBI pot box 3. phase D

163 PLa 77 708. phi75 LCI
Vessel Type:jar.cooking pot?
Ware:med.coarse,gray,surfaces reddish. burnt?
Location:side
Mark:X,line joining top.horiz.line above.incomplete
Notes:LBI pot box 2. phase D

164 PLa 77 708. phi 75 LCI
Vessel Type:jug?
Ware:Cyc.white or LL
Location:base
Mark:2 round impressions
Notes:

165 PLa 77 708. phi 75 LCI
Vessel Type:jug?
Ware:Cyc. white.med.coarse,buff,lt. slip, brown MP
Location:base
Mark:2 lines at acute angle
Notes:LBI pot box 2. phase D

166 PLa 77 708. phi 75 LCI
Vessel Type:base import
Ware:med.coarse, thick,gray, surfaces lt. orange-red
Location:base
Mark:1 line. ?real mark
Notes:LBI pot box 2. phase D

167 PLa 77 707. phi 75 LCI
Vessel Type:Vaphio cup?
Ware:Cyc. white or LL
Location:base
Mark:2 round impressions
Notes:

168 PLa 77 707. phi 75 LCI
Vessel Type:base.closed
Ware:med.,thick,gray core, brick red surfaces
Location:base

Mark:1 oval impression
Notes:

169 PLa 77 707. phi 75 LCI
Vessel Type:base.open.?bowl
Ware:med.fine,gr.core,red surfaces,int.dk.brn.slip
Location:base
Mark:1 round impression
Notes:

170 PLa 77 707. LCI
Vessel Type:Cycladic cup
Ware:Dark burnished.med. fine, gray buff.
Location:base
Mark:curved thick line.?real mark
Notes:LBI pot box 5. phase D

171 PLa 77 100. phi 75 LCI
Vessel Type:sherd
Ware:med. coarse, brown, ext. burnt?
Location:shoulder
Mark:2 lines at acute angle cut by vertical
Notes:LBI pot box 2. phase D

172 PLa 77 100. LCI
Vessel Type:panelled cup
Ware:med.fine,buff dk. brown matt paint
Location:base
Mark:X
Notes:LBI pot box 3. phase D

173 PLa 69 87. phi 75 LCI
Vessel Type:handle
Ware:Cyc. white ? med.,buff to pink buff,surface cream
Location:handle
Mark:1 thick horizontal line. ?real mark
Notes:

174 PLa 69 8 . phi 75 LCI
Vessel Type:sherd
Ware:med.coarse, red brown, surfaces gray
Location:side
Mark:2 lines at rt.angle,pt.of 3rd,applied crescent
Notes:LBI pot box 2.phase D

175 piS 11. LCIIA
Vessel Type:panelled cup
Ware:fine, lt. buff, dk. brown matt paint
Location:base
Mark:3 oval impressions
Notes:LBI pot box 5. phase D

176 piS 14 921 under 13 920. phi 75 LHIIA
Vessel Type:handle or kylix stem
Ware:med.fine,buff,dark inclusions
Location:handle
Mark:V
Notes:

177 piS 6 910 phi75 LHIIA
Vessel Type:bowl?
Ware:med.coarse,reddish,?white slip
Location:side
Mark:2 thick horiz.lines crossed by 2 vert.,curve
Notes:?Linear B sign

178 KKd 28 2086. phi 76 LHIIA
Vessel Type:side & handle.closed
Ware:med., lt.gray-buff,surf.pink-buff,red-brown slip
Location:handle
Mark:2 vertical lines
Notes:

179 KKd 23 2080. phi 76 LHIIA
Vessel Type:barrel jar?
Ware:med.,gray, ext. buff
Location:handle
Mark:triangle
Notes:

180 KKd 23 2080. phi 76 LHIIA
Vessel Type:base
Ware:Dark burnished. thick, med.fine, orange-buff
Location:base
Mark:5 short lines forming H
Notes:

181 PK 25. phi 75 LHII
Vessel Type:handle
Ware:med.coarse,dk.red-brn,brn.core,surface dk.gray-brn
Location:handle
Mark:part of a line. ?real mark
Notes:

182 PK 25 LHII
Vessel Type:base.closed?
Ware:Dark burnished.fine,buff.
Location:base
Mark:3 round impressions, very worn
Notes:

183 PK 18 832 under 831. phi 75 LHII
Vessel Type:sherd.?open
Ware:med., dark red brown, ? slip
Location:side
Mark:2 small round impressions. ?real mark
Notes:

184 PK 28 844. phi 75 LHII
Vessel Type:handle
Ware:coarse, white slip, pr.MMP
Location:handle
Mark:3 dents with pointed tool
Notes:

PHASE E:

185 piA 60 273 under 59. phi 75 LHIIIA
Vessel Type:base.closed.?jar

Ware:med.,red-brown,?gray-cream slip
Location:base
Mark:3 round impressions, 1 opposite
Notes:

186 piA 7 pb 206 . phi 74 LHIIIA
Vessel Type:handle
Ware:med.fine,black core, ext.pink-buff
Location:handle
Mark:1 thick line
Notes:

187 piA 46 259.megaron founds. phi 75 LHIIIA1
Vessel Type:body sherd
Ware:fine,gray,surfaces buff
Location:side
Mark:incomplete "kite"
Notes:

188 NLa 330 1455. phi 76 LHIIIA1
Vessel Type:handle
Ware:med.,red-brown, ?plain
Location:handle
Mark:1 line
Notes:

189 NLa 329 1454 cont 1453. phi 76 LHIIIA1
Vessel Type:body sherd.closed
Ware:med.fine, buff
Location:side
Mark:arrow. ?real mark
Notes:

190 NLa 328 1452 arbitrary. phi 76 LHIIIA1-2
Vessel Type:handle
Ware:med.,red-brown, ?burnt
Location:handle
Mark:2 parallel lines
Notes:

191 NLc 225. phi 76 LHIIIA1
Vessel Type:jug?
Ware:Cyc. white. fine
Location:base
Mark:1 oval impression, ?2nd opposite
Notes:

192 NLc 225. phi 76 LHIIIA1
Vessel Type:jug?
Ware:Cyc. white
Location:base
Mark:3 round impressions
Notes:

193 NLc 225 1346. phi 76 LHIIIA1
Vessel Type:base
Ware:Cyc. white. fine
Location:base
Mark:2 oval impressions

Notes:

194 NLc 225 1345. phi 76 LHIIIA1
Vessel Type:jug/cup/bowl
Ware:Dark burnished. fine, buff
Location:base
Mark:2 round impressions
Notes:

195 NLc 225 1342. phi 76 LHIIIA1
Vessel Type:jug?
Ware:med.fine, orange-buff, orange-red slip
Location:base
Mark:2 round impressions
Notes:

196 NLc 224 1339. phi 76 LHIIIA1
Vessel Type:base
Ware:fine, buff, sandy, lt. brown slip
Location:base
Mark:2 oval impressions
Notes:

197 NLc SW 243 1364 under 242. phi 77 LHIIIA2-B
Vessel Type:base
Ware:Cyc. white? med.fine, buff, sandy.
Location:base
Mark:2 oval impressions
Notes:

198 NL d/e space c sondage 121. phi 76 LHIIIA2
Vessel Type:base.?closed
Ware:med. gray-buff, surfaces red-buff, ext. cream ?slip
Location:base
Mark:2 oval impressions
Notes:W of wall 513 under 118 #1532

199 PK 15 825 under 824 LHIIIA
Vessel Type:base. bowl?
Ware:med.fine, almost black. ext. lt. red
Location:base
Mark:1, possibly 2 lines
Notes:box 8

200 PK 15 829 under 826 LHIIIA
Vessel Type:base
Ware:Cyc. white? med.fine, buff
Location:base
Mark:curved line
Notes:box 6

201 PK 15 829 under 826 LHIIIA
Vessel Type:base
Ware:Cyc. white? fine, buff
Location:base
Mark:3 parallel cuts
Notes:box 6

202 PK15 824 under 823 LHIIIA

Vessel Type:base
Ware:med.coarse,dk.gray, reddish ext.,surface lt.gray
Location:base
Mark:very long tailed Y
Notes:box 7

203 PK 15 LHIIIA
Vessel Type:base
Ware:med.fine, buff
Location:edge of base
Mark:3 cuts
Notes:box 5

204 PK 15 LHIIIA
Vessel Type:conical cup?
Ware:med.,brown-buff, light slip
Location:base
Mark:several nicks. ?real mark
Notes:box 5

205 PK 22 837 under 9817.N of W122. phi 75 LHIIIA
Vessel Type:base
Ware:Cyc. white? med.,pale gray,pale buff slip
Location:base low on side
Mark:1 round impression 2 round impressions
Notes:

206 PK 22 837 under 9 817 N of W122. phi75 LHIIIA
Vessel Type:?base
Ware:med.,v.dk.gray core,red-brn surface.smoothed
Location:side
Mark:4 round impressions,incomplete hole in side.real?
Notes:

207 PK 22 837 under 9 817 N of W122. phi75 LHIIIA
Vessel Type:barrel jar
Ware:med.red-brown, surface smoothed
Location:handle
Mark:sideways V
Notes:

208 PK 14 822 under 11 LHIIIA
Vessel Type:jug/amphora?
Ware:medium, soft, buff. surface lighter, worn
Location:base
Mark:1 line
Notes:box 4

209 PK 9 817 LHIIIA
Vessel Type:jug? base
Ware:med. fine, pale pinkish buff
Location:base
Mark:1 line
Notes:box 3

210 PLa 57 74. phi 77 LHIIIA
Vessel Type:foot
Ware:fine, buff, slipped
Location:base

Mark:3 round impressions
Notes:phase E

PHASE F:

211 MKd 901 3201. phi 77 LHIIIC+
Vessel Type:base
Ware:coarse,brown,ext.pink-buff,dk.gray slip
Location:base
Mark:X
Notes:

212 MLb room A 976 3331. phi 77 LHIIIB/C
Vessel Type:sherd
Ware:med.coarse,gray/pink.int.reddish. ?slip
Location:side
Mark:2 parallel lines. ?real
Notes:storeroom shelves

213 MLb 970 3324. phi 77 LHIIIC
Vessel Type:body sherd.closed
Ware:med.fine,pink-buff,orange-red slip
Location:side
Mark:1 oval impression
Notes:

214 MLb room A 976 3331.phi74 LHIIIC mid
Vessel Type:handle.?closed
Ware:med.coarse,gray/pink,?slip. burnt
Location:handle
Mark:X
Notes:storeroom shelves

215 NK c/d 804 3115. phi 77 LHIIIC late
Vessel Type:beaked jug
Ware:Cyc. white? surface gray-buff
Location:neck
Mark:5 punched circles, part of sixth. ?decorative
Notes:

216 NLb 416 pb 1620. phi 76 LHIIIClate
Vessel Type:open base
Ware:Dark burnished? med.fine, gray,black slip
Location:base
Mark:cross
Notes:

217 NLb 408 pb 1609. phi 76 LHIIIClate
Vessel Type:handle
Ware:med.gray buff, heavy
Location:handle
Mark:2 parallel lines
Notes:

218 NLb 436 1646. phi 76 LHIIIB/C
Vessel Type:?closed base
Ware:med.fine,gray brown,dk.brown slip
Location:low on side
Mark:1 vertical line
Notes:

219 NLc (SE) 252 1372. phi 77 LHIIIC mid
Vessel Type:panelled cup?
Ware:Cyc. white
Location:base
Mark:2 round impressions
Notes:

220 NLc (SE) 247 1368. phi 77 LHIIIC mid
Vessel Type:base
Ware:Cyc. white. med.fine,gray, ext. lt. brown
Location:low on side
Mark:2 round impressions
Notes:

221 NLd space 3 36 653 under 33,35. phi 75 LHIIIC mid
Vessel Type:handle
Ware:med.,buff,red-orange paint,worn
Location:handle
Mark:1 vertical line, part of angled one
Notes:

222 NLd space 3 35 652 under 28. phi 75 LHIIIC mid
Vessel Type:jug?
Ware:Cyc. white, ?reed pattern
Location:edge of base
Mark:1 cut
Notes:

223 NLd space 3 33 649 under 31. phi 75 LHIIIC mid
Vessel Type:sherd
Ware:med.brick red & dk.brown gray,surface gray-buff
Location:side
Mark:X and part of vertical line
Notes:

224 NLd space 3 28 644 under 27. phi 75 LHIIIC mid
Vessel Type:open base
Ware:brittle ware? fine,buff, int.red burnished
Location:low on side
Mark:V
Notes:

225 NLd space 1 56 878 sieving. phi 75 LHIIIC mid
Vessel Type:sherd
Ware:brittle ware? med. fine, gray buff
Location:side
Mark:1 line. ?real mark
Notes:

226 NLd space 1 19 634 under 17 632. phi75 LHIIIC mid
Vessel Type:handle
Ware:med.fine,red-brown,gritty, surfaces gray
Location:handle
Mark:1 thick horiz. line
Notes:

227 NLd space 4 624. phi 75 LHIIICmid
Vessel Type:handle

Ware:med.fine,pink-buff,thick cream slip,dk.brown MP
Location:handle
Mark:1 line
Notes:

228 NLe space c 92 1221 under 91. LHIIIB/C
Vessel Type:handle
Ware:med. fine, buff, ?paint
Location:handle
Mark:V with vertical line between legs. incomplete
Notes:

229 NLe 109. phi 76 LHIIIC
Vessel Type:handle
Ware:med.fine, pinkish,white slip,black paint,burnished
Location:handle
Mark:3 incisions. ?real mark
Notes:

230 OLc 11 pb 125. phi 74 LHIIIC late
Vessel Type:jug?
Ware:Cyc white? med.fine,thick, cream-buff
Location:side
Mark:2 round impressions
Notes:

231 OLd 58 193 under 50 182. phi 75 LHIIIC mid
Vessel Type:leg of tripod pot
Ware:med.coarse,purple-brn core,red-orng.,surface gray
Location:handle
Mark:arrow
Notes:

232 OLd 57 192 under 55 191. phi 75 LHIIIC mid
Vessel Type:handle
Ware:med.,buff core,orange-buff,red,white & brn paint
Location:handle
Mark:1 line
Notes:

233 OLd 54 191 under 188. phi 75 LHIIIC mid
Vessel Type:leg of tripod pot?
Ware:med.,buff,orange-red paint
Location:leg
Mark:1 deep line
Notes:

234 OLd 53. phi 75 LHIIIC late
Vessel Type:tripod vessel leg?
Ware:med.fine,gritty,red-brown,dk.gray ?slip
Location:leg
Mark:1 thick deep line
Notes:

235 OLd 53 187 under 186. phi 75 LHIIIC mid
Vessel Type:horiz.handle
Ware:med.fine,red brown,mica, surface v. dark gray
Location:side, beside handle
Mark:1 fingernail mark.?real mark

Notes:

236 OLd 52 184 under 183. phi 75 LHIIIC mid
Vessel Type:tripod vessel leg
Ware:med.,red-buff,gritty
Location:leg
Mark:2 parallel lines. ?real mark
Notes:

237 OLd 50 182. phi 75 LHIIIC late
Vessel Type:handle
Ware:med.fine,buff to red-buff,off white slip
Location:handle
Mark:1 short thick line
Notes:

238 OLd 50 183 under 182. phi 75 LHIIIC late
Vessel Type:panelled cup
Ware:Cyc. white
Location:base
Mark:1 line
Notes:

239 OLd 47 179 under 46. phi 75 LHIIIC late
Vessel Type:shallow bowl?
Ware:Cyc. white? med.fine, gray-buff.
Location:base
Mark:1 round impression
Notes:

240 PK 5 807,808 pit fill LHIIIB1
Vessel Type:handle
Ware:med. fine, buff
Location:handle
Mark:1 wide line. ?real
Notes:box 1

241 PK 5 807,808 pit fill LHIIIB1
Vessel Type:sherd
Ware:med.coarse,gray. reddish surface
Location:side
Mark:3 sub circular impressions. ?real
Notes:box 1

242 PK 5 807,808 pit fill LHIIIB1
Vessel Type:base
Ware:med.fine,gray, lt. brown surface, v. flaky
Location:base
Mark:1 line. ?real mark
Notes:box 2

243 PK 5 807, 808 LHIIIB1
Vessel Type:jug? handle
Ware:Cyc. white?med.fine, orange-buff, pale yellow slip
Location:handle
Mark:1 vertical line. ?real
Notes:box 2

244 PLa 37 pb 52. phi 74 LHIIIC+

Vessel Type:handle
Ware:med.fine,reddish brown
Location:handle
Mark:pi
Notes:

245 PLa 31 pb 46 pit 1. phi 74 LHIIIC+
Vessel Type:jar rim and handle
Ware:med.fine,brick red, int. and ext.dark gray
Location:handle
Mark:1 vertical line
Notes:

246 PLa 25 38. phi 74 LHIIIC
Vessel Type:sherd
Ware:med.coarse,dk.gray, int.red, ext. dk. gray
Location:side
Mark:several criss-crossing lines. ?decorative
Notes:phase F

247 PLa 20 30. door blocking. phi 74 LHIIIB/C
Vessel Type:sherd
Ware:coarse, dk. gray, surfaces orange
Location:side
Mark:several random lines. ?real mark
Notes:

SURFACE AND UNSTRATIFIED:

248 piB 1 667. phi 75. MacKenzie backfill unstrat
Vessel Type:base
Ware:fine, buff ?plain
Location:base
Mark:1 oval impression
Notes:

249 piB 1 pb 301. phi 74 backfill
Vessel Type:base
Ware:fine,gray core, pink-orange ext.
Location:base
Mark:1 line. ?real mark
Notes:

250 piC 1 Pb 316. phi 74 unstrat.
Vessel Type:sherd
Ware:fine,gray, surfaces dark red
Location:side
Mark:several faint lines. ?real mark
Notes:box 95

251 piJ 2 unstrat. phi 75 unstrat
Vessel Type:base.open
Ware:med.fine,gray, int. brown,burnished. ext.buff
Location:base
Mark:3 short cuts
Notes:

252 piT2 phi75 unstrat
Vessel Type:base

Ware:coarse, buff, gray core. buff slip, shiny brown glaze
Location:edge of base
Mark:2 parallel cuts
Notes:

253 KKd 8 2062 . phi 76 unstrat
Vessel Type:leg of tripod pot
Ware:med., brown to brick red, surface dark gray
Location:top of leg
Mark:1 vertical line. ?real mark
Notes:

254 KKd 5 2057. phi 76 unstrat
Vessel Type:closed base
Ware:Cyc. white? med., buff, orange-red paint
Location:base
Mark:1 oval impression
Notes:

255 KKd 4 2054. phi 76 unstrat
Vessel Type:sherd ?open
Ware:med., lt. gray, red-brown slip
Location:side?
Mark:1 round impression
Notes:

256 KKd 18 2074. phi 76 unstrat
Vessel Type:base.?closed
Ware:Cyc white? fine, buff, dk. brown paint
Location:base
Mark:1 round impression
Notes:

257 KKd 14 2069. phi 76 unstrat
Vessel Type:base
Ware:Dark burnished? heavy, med. coarse, gray. dk. gray slip
Location:base
Mark:2 fingernail impressions
Notes:

258 KKd 13 2068. phi 76 unstrat
Vessel Type:base. open
Ware:Dark burnished. thick.
Location:base
Mark:1 oval impression
Notes:

259 KKd 13 2068. phi 76 unstrat
Vessel Type:base.?open
Ware:med., buff, lt. brown ?slip
Location:base
Mark:3 round impressions
Notes:

260 KKd 11 2066. phi 76 unstrat
Vessel Type:base
Ware:med. coarse, thick, buff-brown, dk. gray ?slip
Location:base
Mark:1 round impression

Notes:

261 PLa 82 740. phi 75 unstrat.
Vessel Type:base.open
Ware:Cyc. white or LL. fine
Location:base
Mark:1 round impression, part of another
Notes:

262 PLa 82 710. phi 75 unstrat
Vessel Type:base.?open
Ware:med.,red-brown,surfaces gray
Location:base
Mark:1 round impression
Notes:

263 PLa 7 55.1910 dump,unstrat. phi 75 unstrat
Vessel Type:base
Ware:fine, gray, surface lt. orange, burnished
Location:base
Mark:4 lines forming IF, incomplete
Notes:

264 unstrat. megaron cleaning. phi 75 unstrat
Vessel Type:handle-through side
Ware:med.,?gray
Location:handle
Mark:2 chevrons above 2 short horizontal lines
Notes:

265 KLd 7up/surface. phi 76 Surface
Vessel Type:open base
Ware:med.coarse,gritty,surfaces red-brown,burnt
Location:base
Mark:3 round impressions
Notes:

266 MLb 1 1903 surface. phi 76 surface
Vessel Type:body sherd
Ware:fine,gray-white, ?plain
Location:side
Mark:1 vertical line, part of another. ?real mark
Notes:

267 MLb 1 1901 surface. phi 76 surface
Vessel Type:handle
Ware:Cyc. white. med.,gray-buff,surfaces pink-buff
Location:handle
Mark:2 lines at acute angle
Notes:

268 NLa 301 1402.phi 76 surface
Vessel Type:handle
Ware:fine, reddish, white slip, brown MP
Location:handle
Mark:6 impressions in rough diamond-fish?
Notes:surface find

269 NLa 301 1401. phi 76 surface

Vessel Type:cup
Ware:fine,cream,plain
Location:base
Mark:1 oval impression, part of another
Notes:

270 NLa 301 1401. phi 76 surface
Vessel Type:bridge or hole jar
Ware:Cyc. white
Location:base
Mark:1 oval impression
Notes:

271 NLb 410 pb 1611. phi 76 Surface
Vessel Type:jug
Ware:Cyc. white
Location:base
Mark:1 oval impression
Notes:

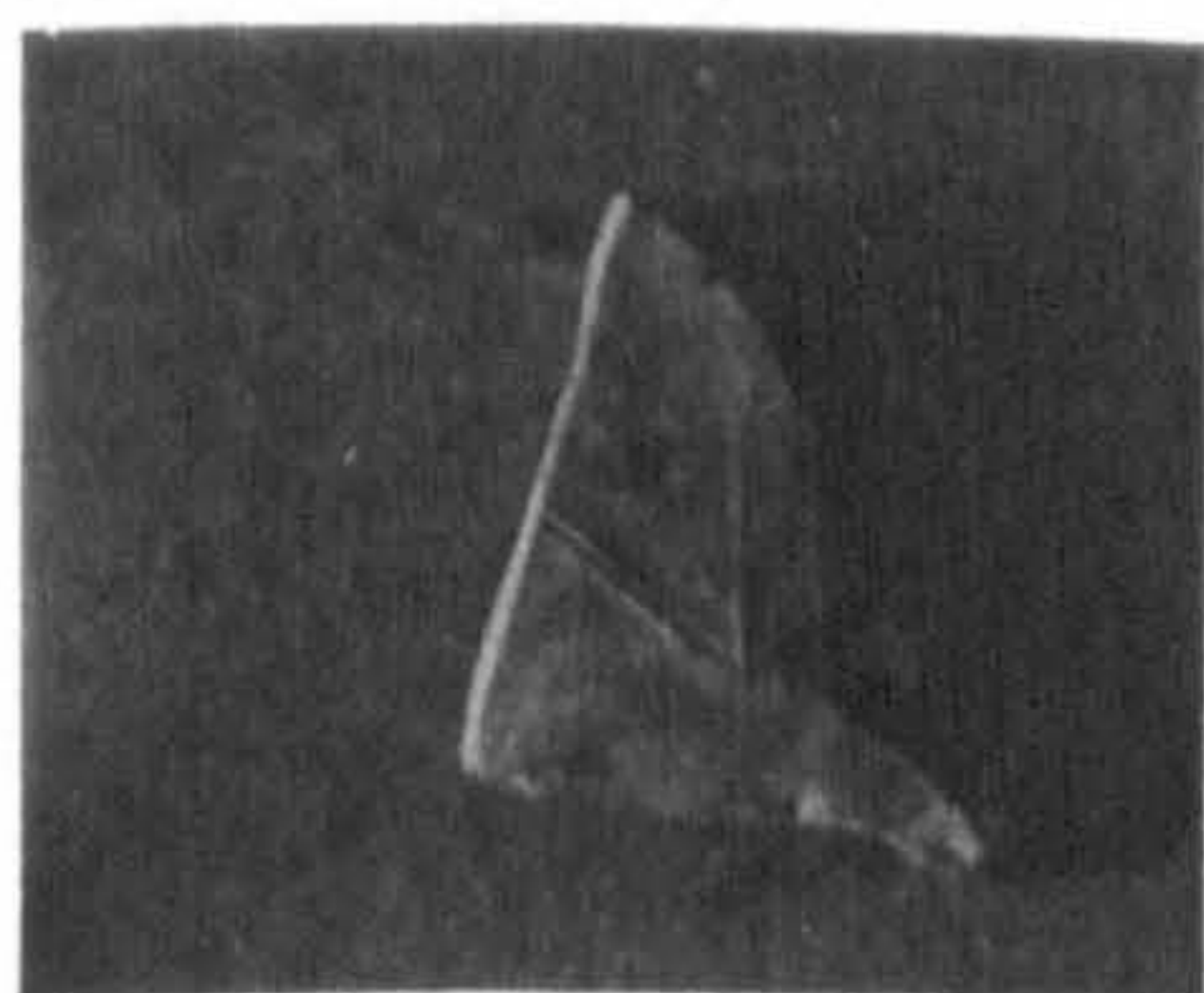
272 NLd E baulk 24 641 under 25 64. phi 75 Surface
Vessel Type:handle
Ware:fine,gray core,red-buff ext.,surface cream
Location:handle
Mark:4 lines in long diamond
Notes:

273 piK E extension 11 666 under 10. phi75 ?EBA.dist
Vessel Type:handle
Ware:med.fine, red-buff
Location:handle
Mark:4 lines in Y with central line
Notes:

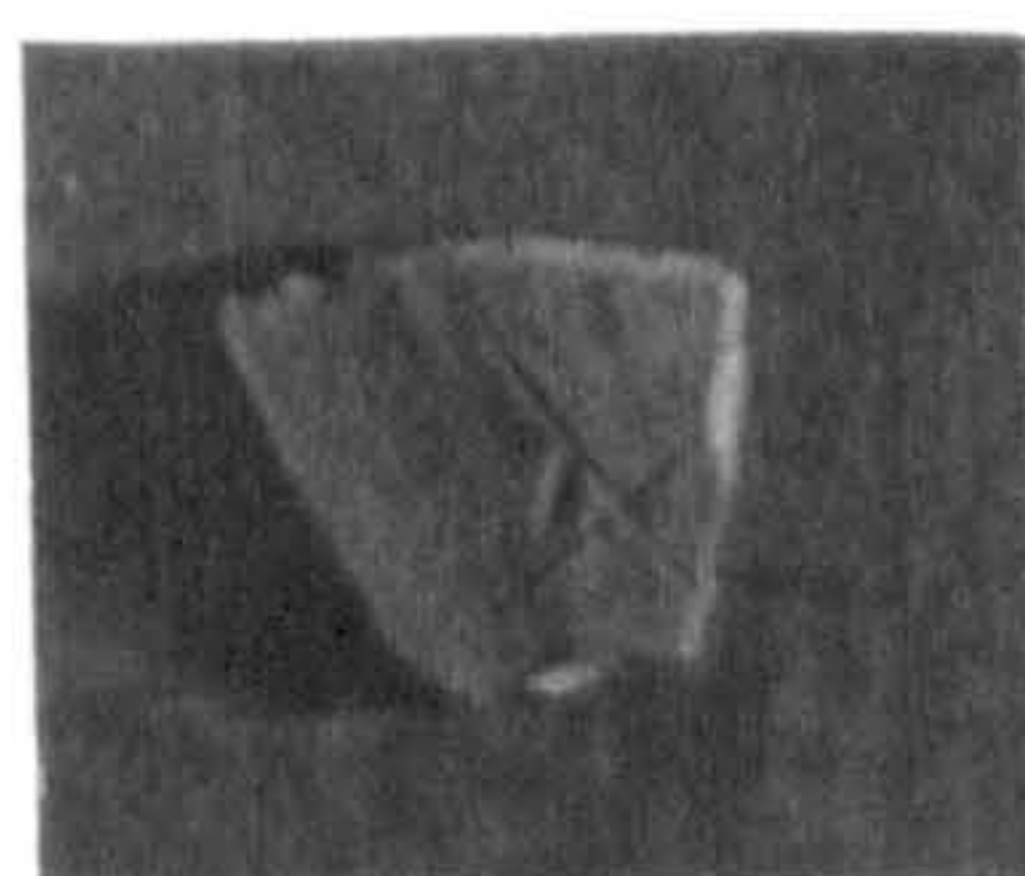
274 piK 3 #657. phi 75 ?EBA. dist
Vessel Type:?open base
Ware:med. fine, gray, thick
Location:base
Mark:1 round impression
Notes:

275 piK 4 658 under 2 . phi 75 ?EBA. dist
Vessel Type:handle
Ware:med.coarse,gray,gritty, smoothed?
Location:handle
Mark:1 vertical line
Notes:

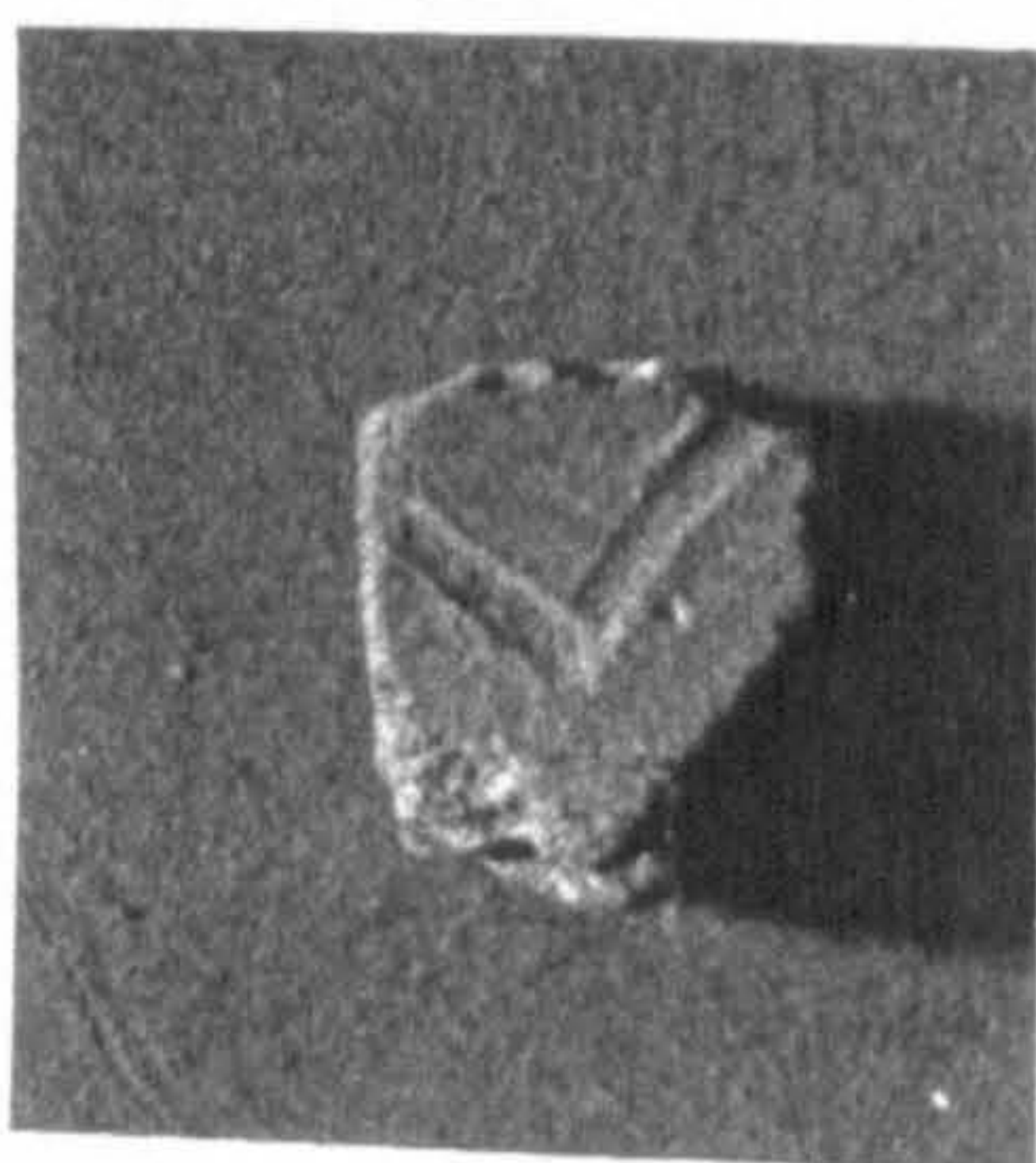
276 piK E extension 11 666 under 10. phi75 ?EBA.dist
Vessel Type:sherd
Ware:Dark burnished. med.fine,red-buff.
Location:side
Mark:2 lines at acute angle. ?real mark
Notes:



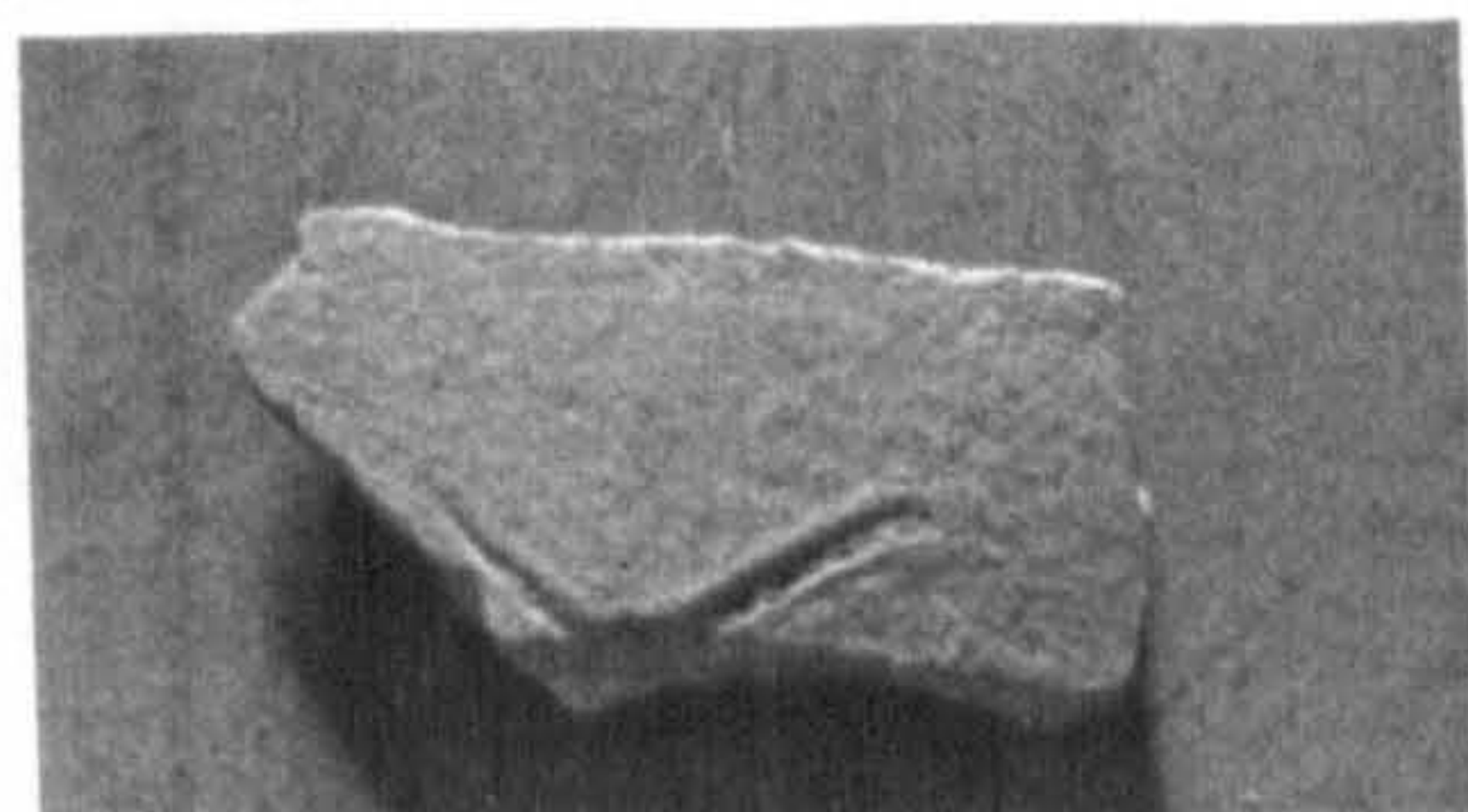
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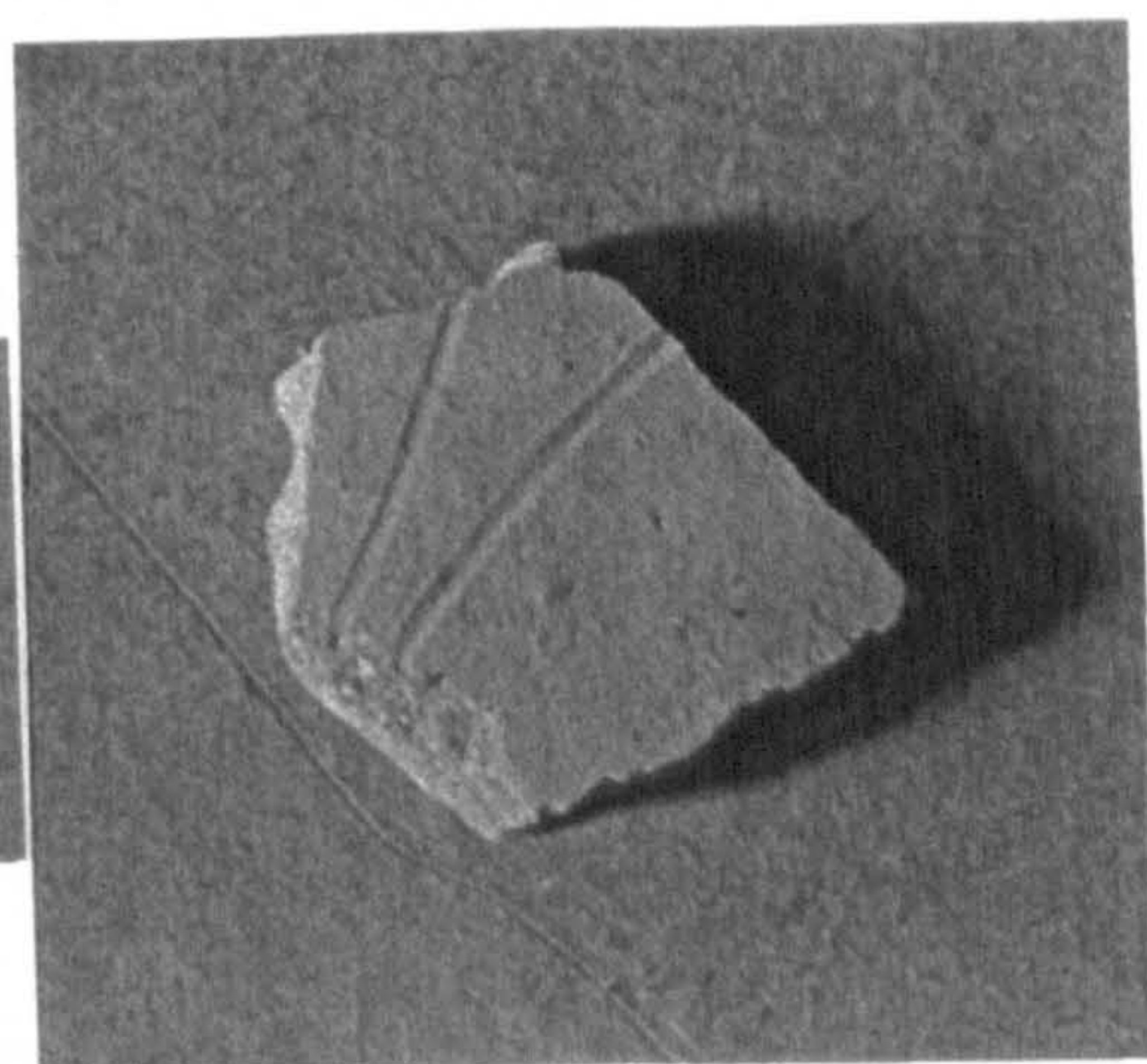
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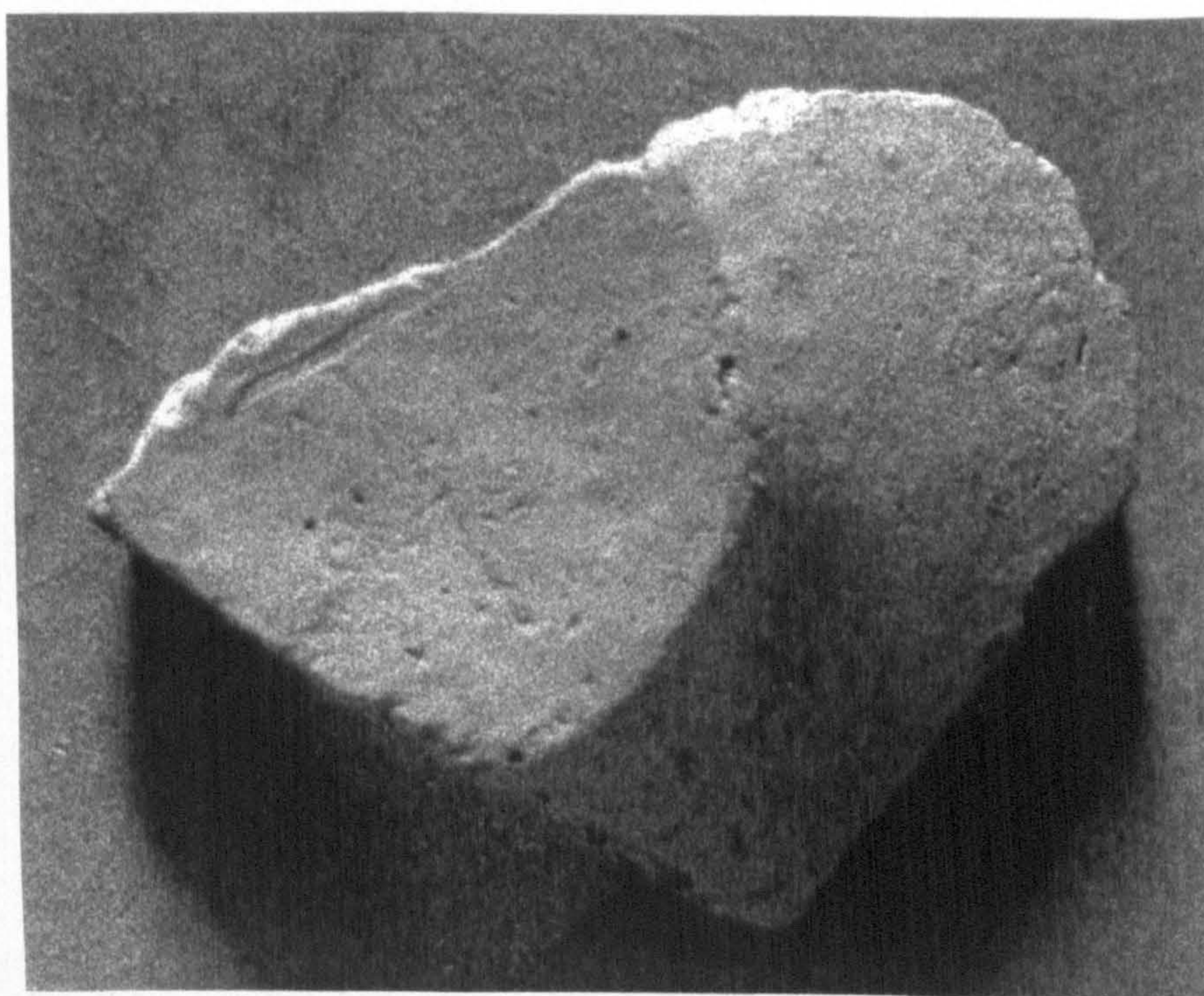
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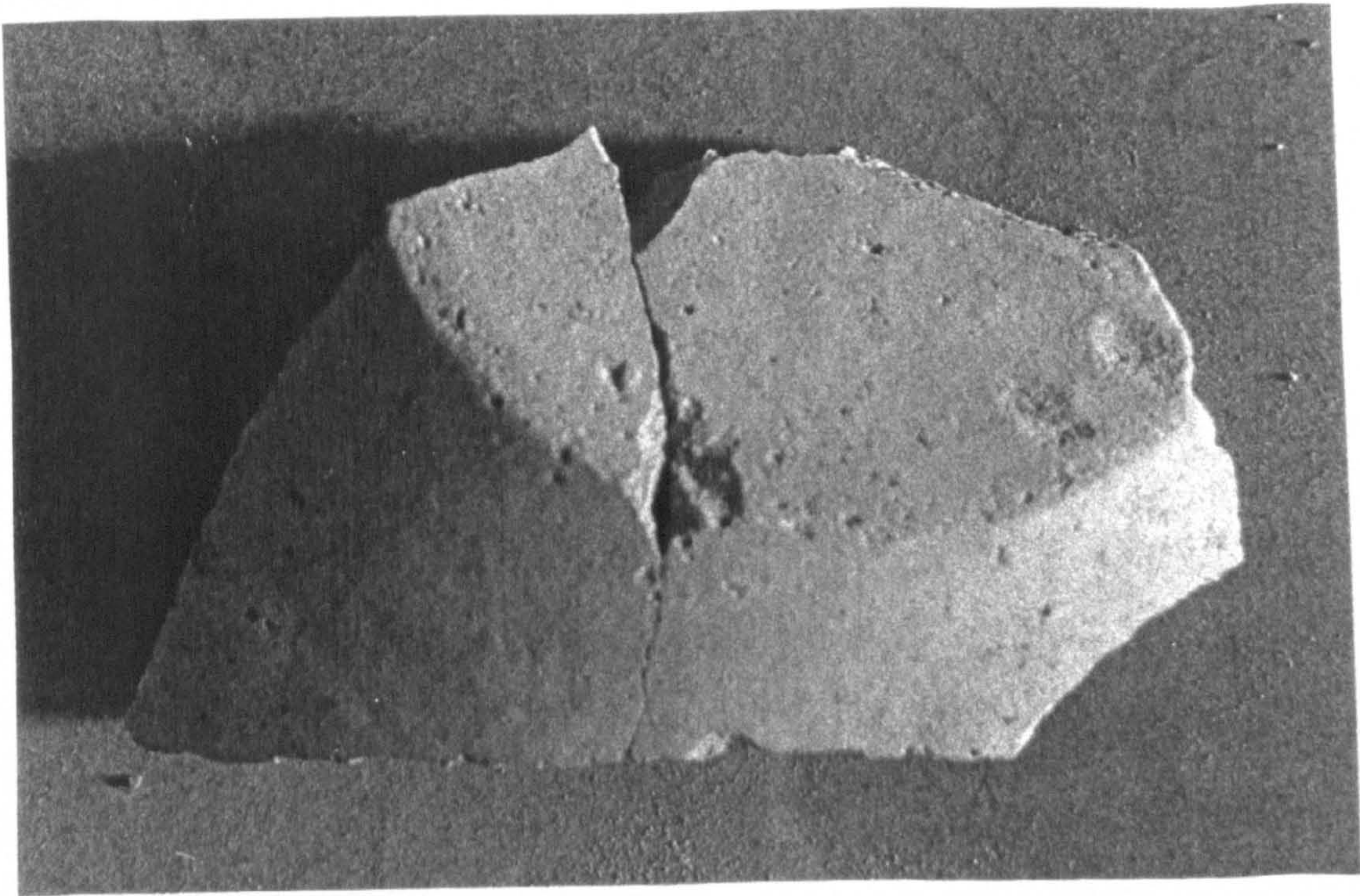
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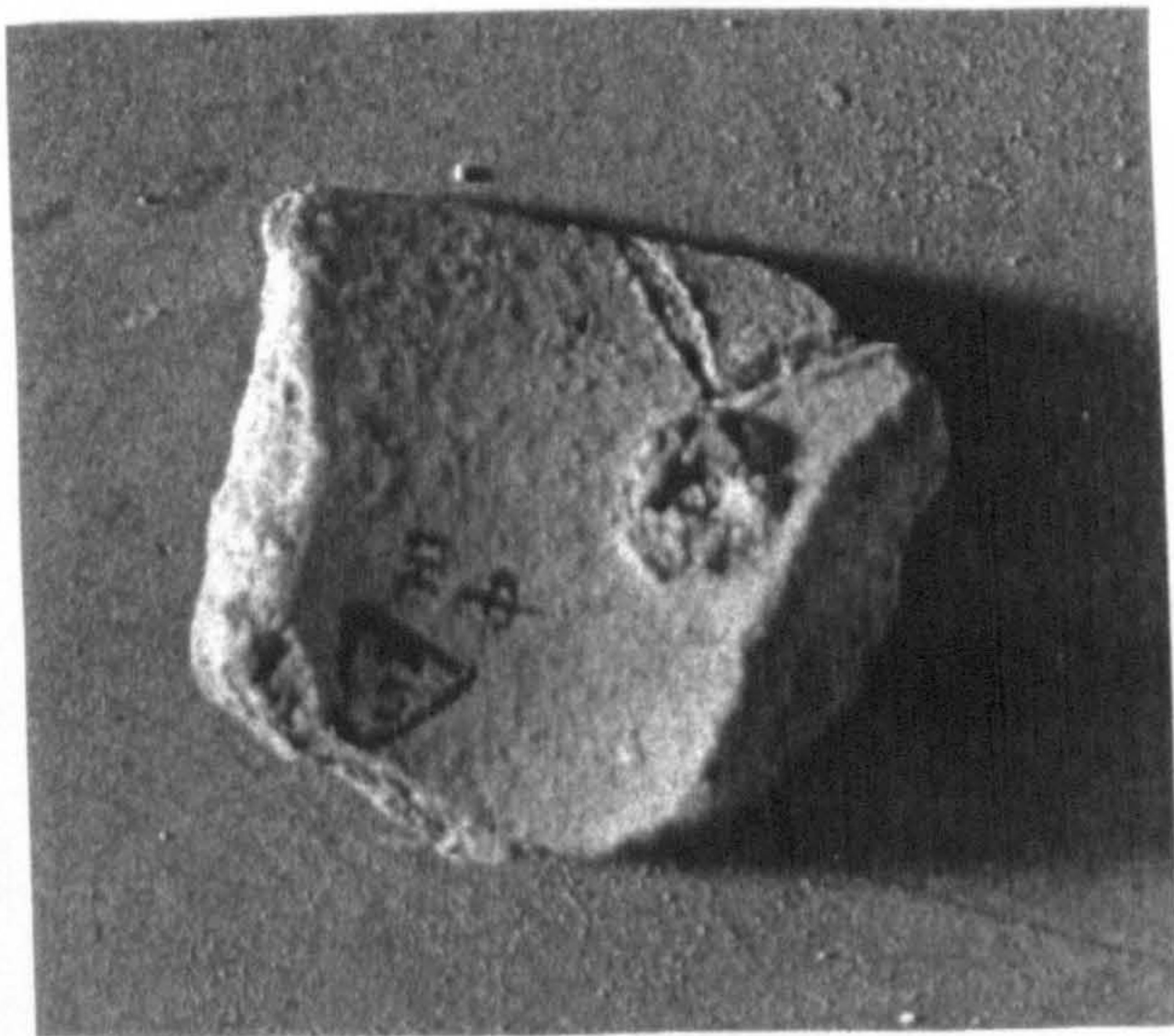
7

I. Phylakopi 1974-77 1-7. Various scales

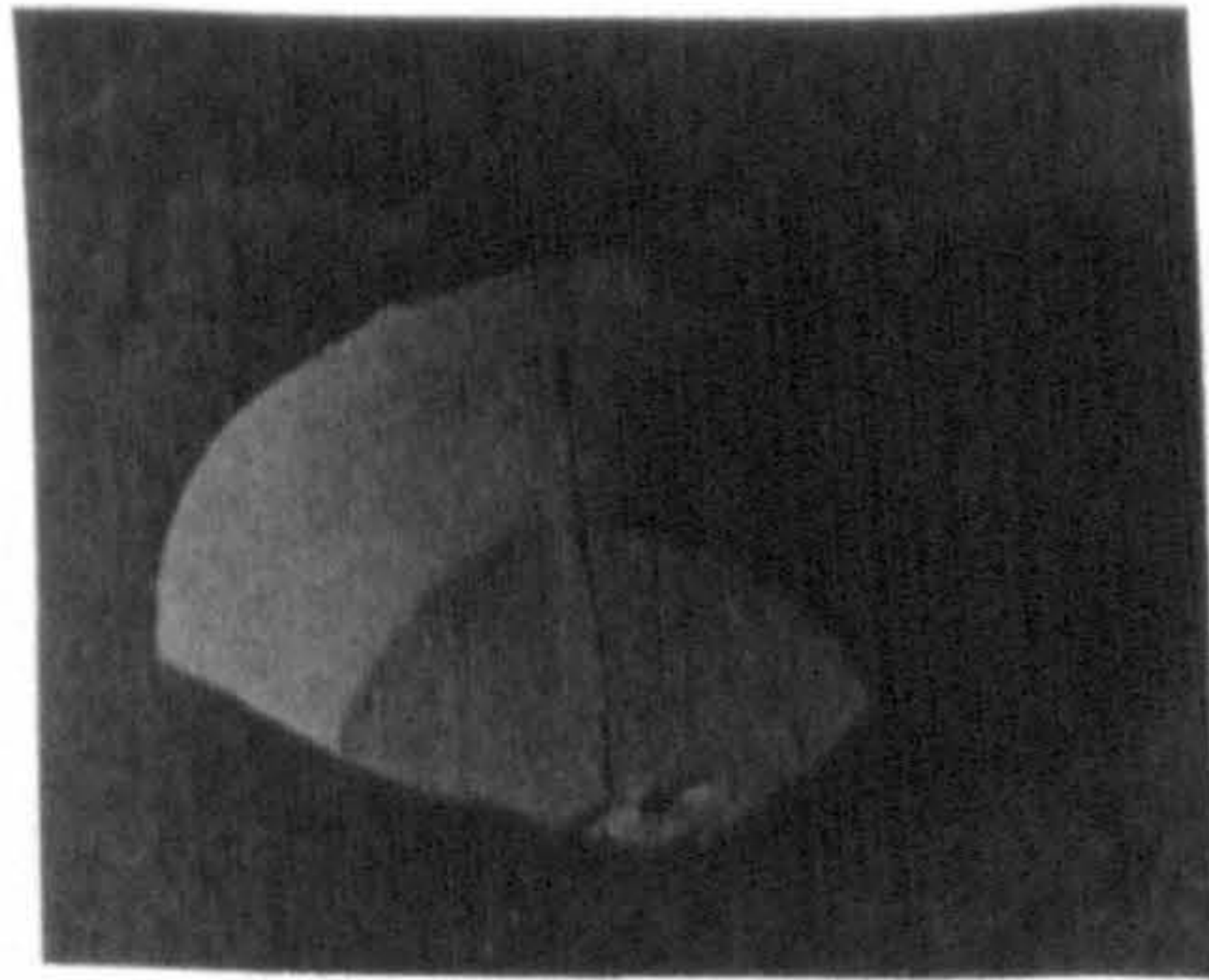
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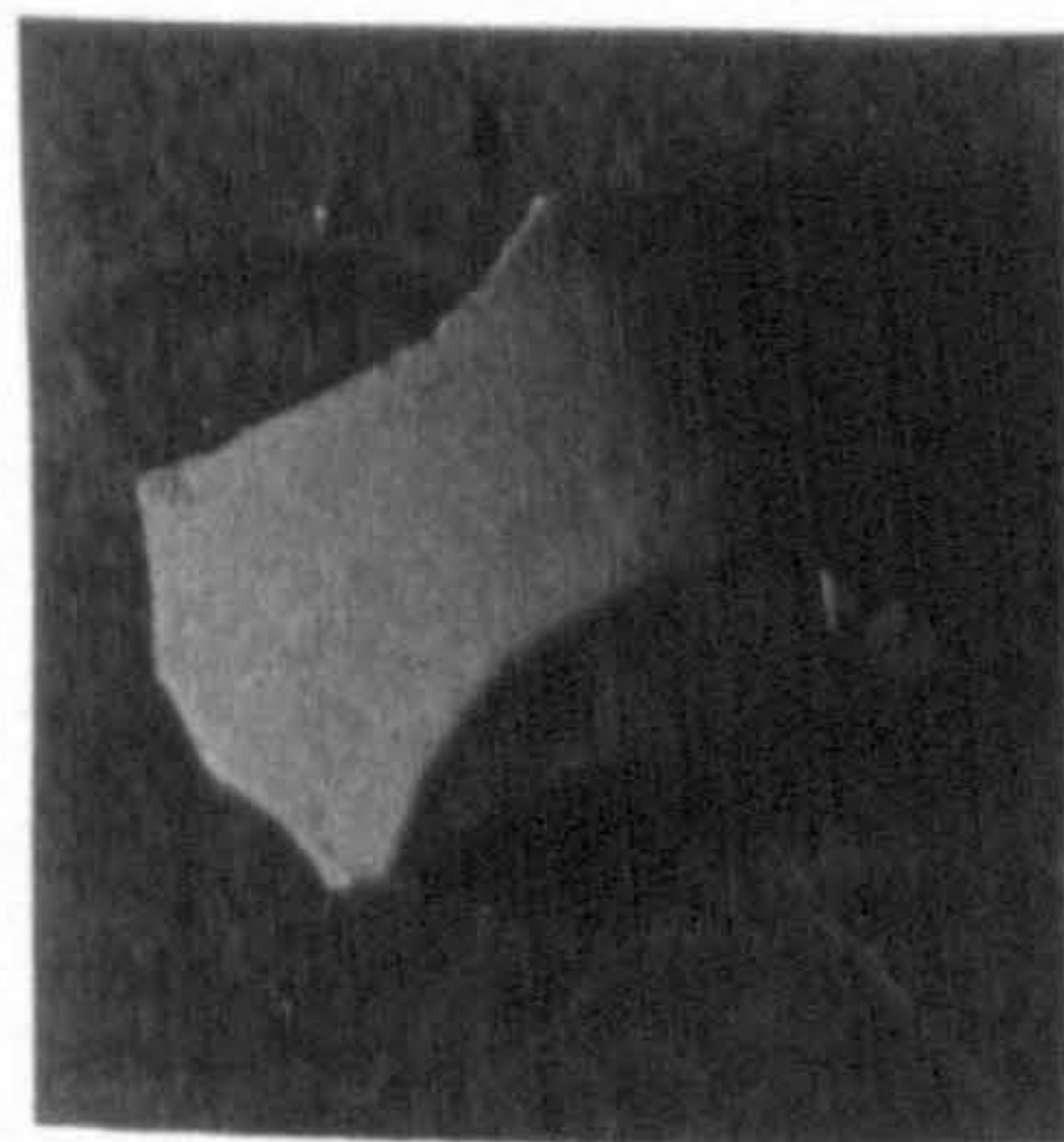
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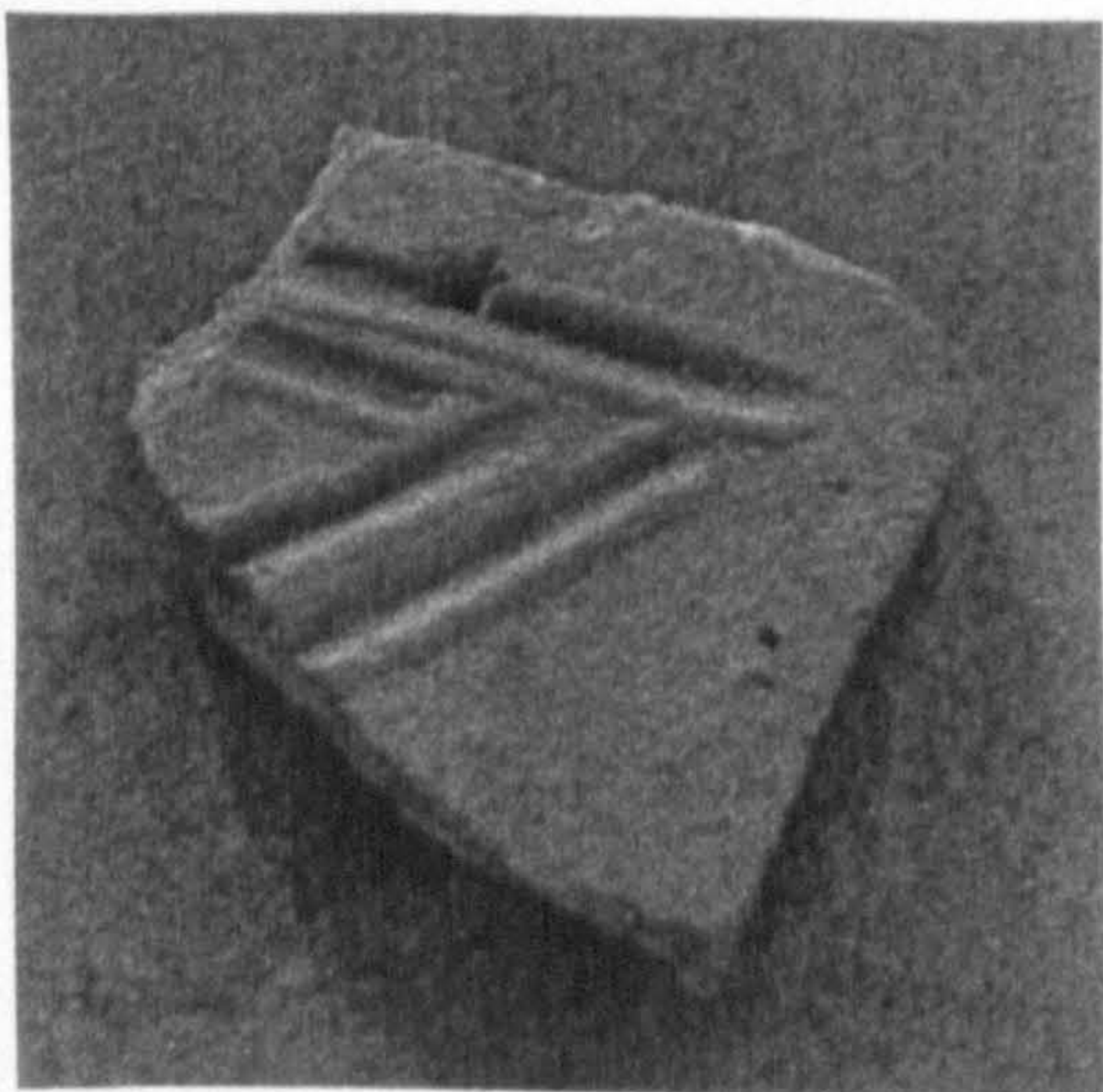
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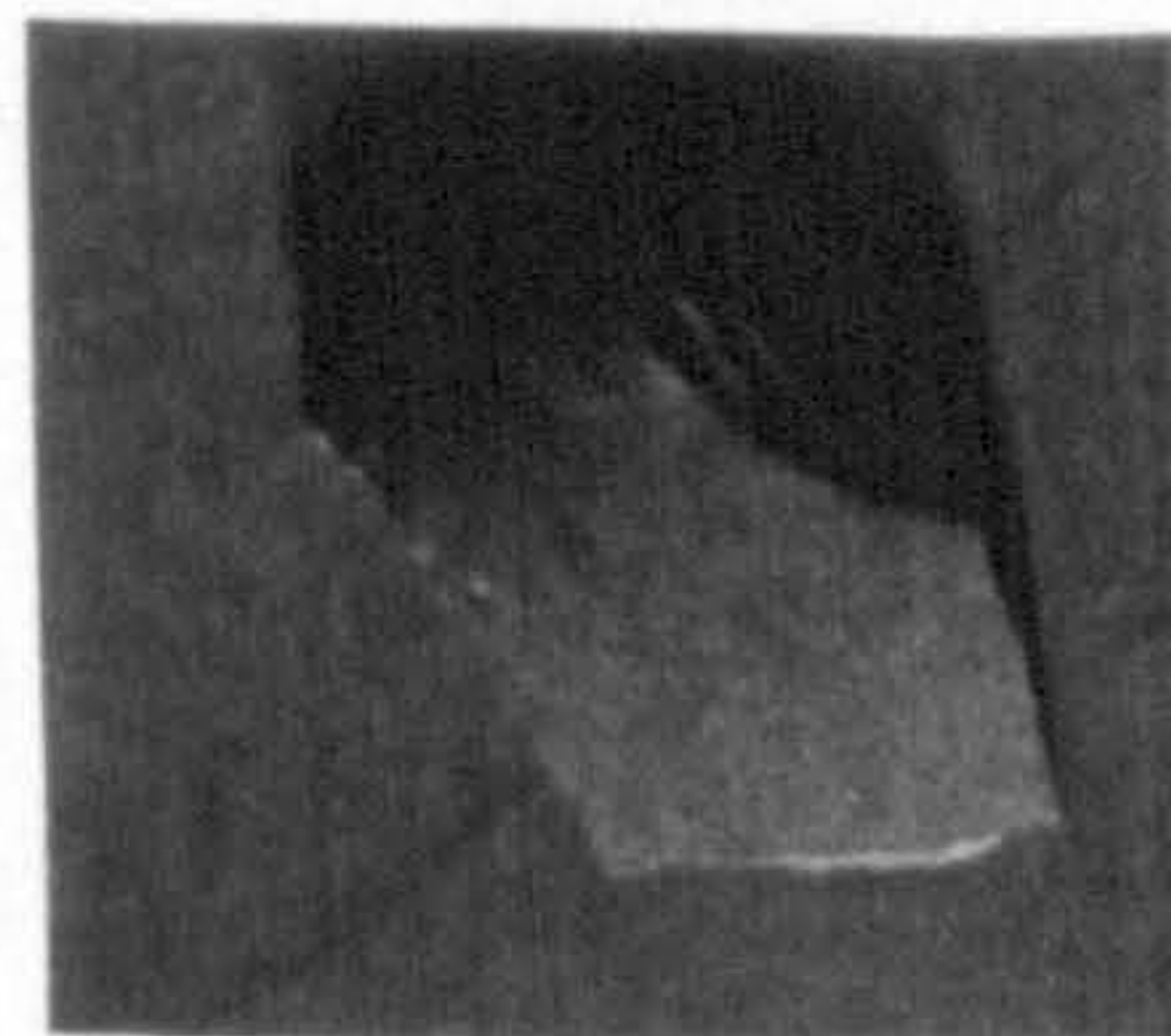
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11

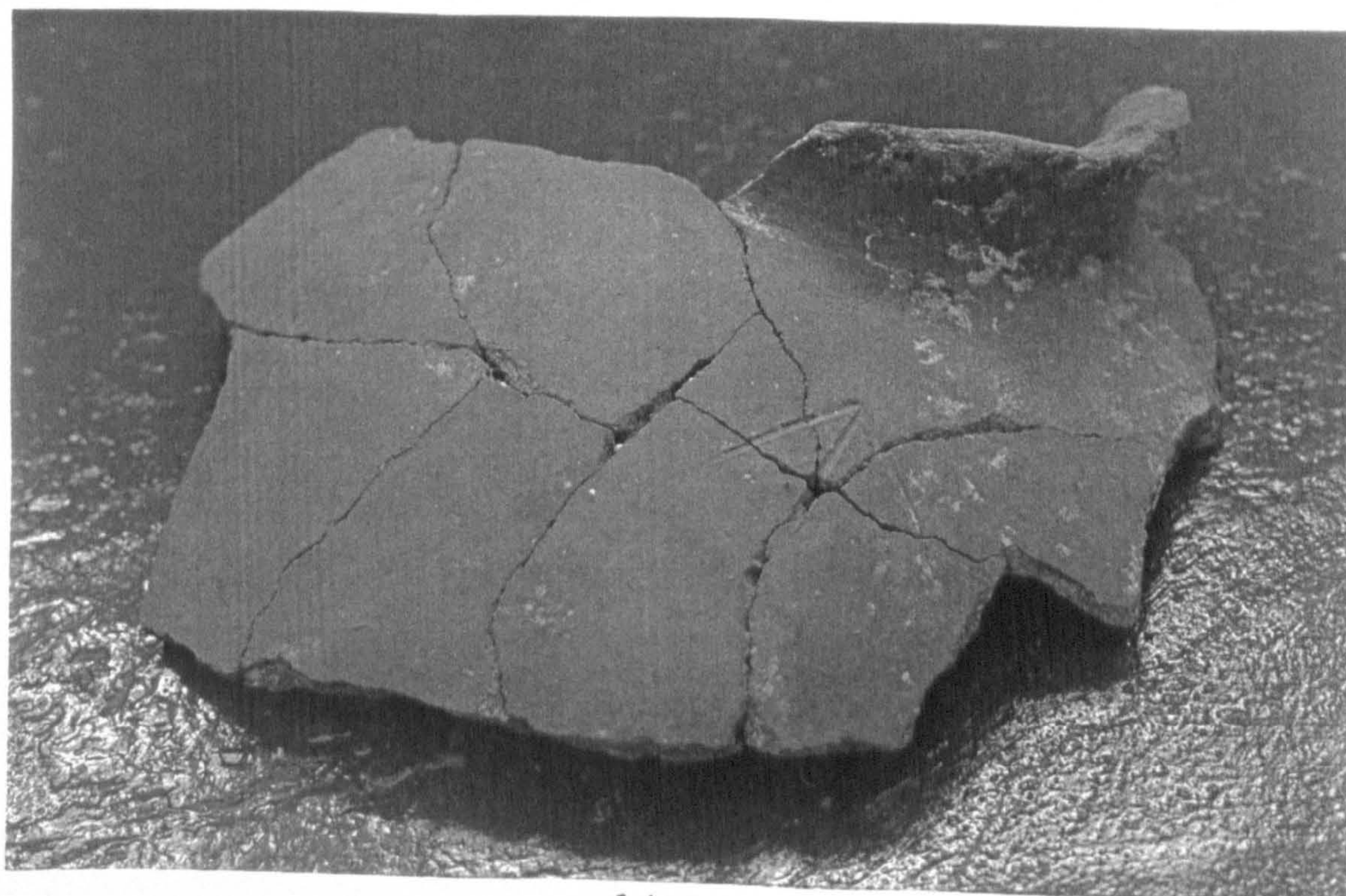


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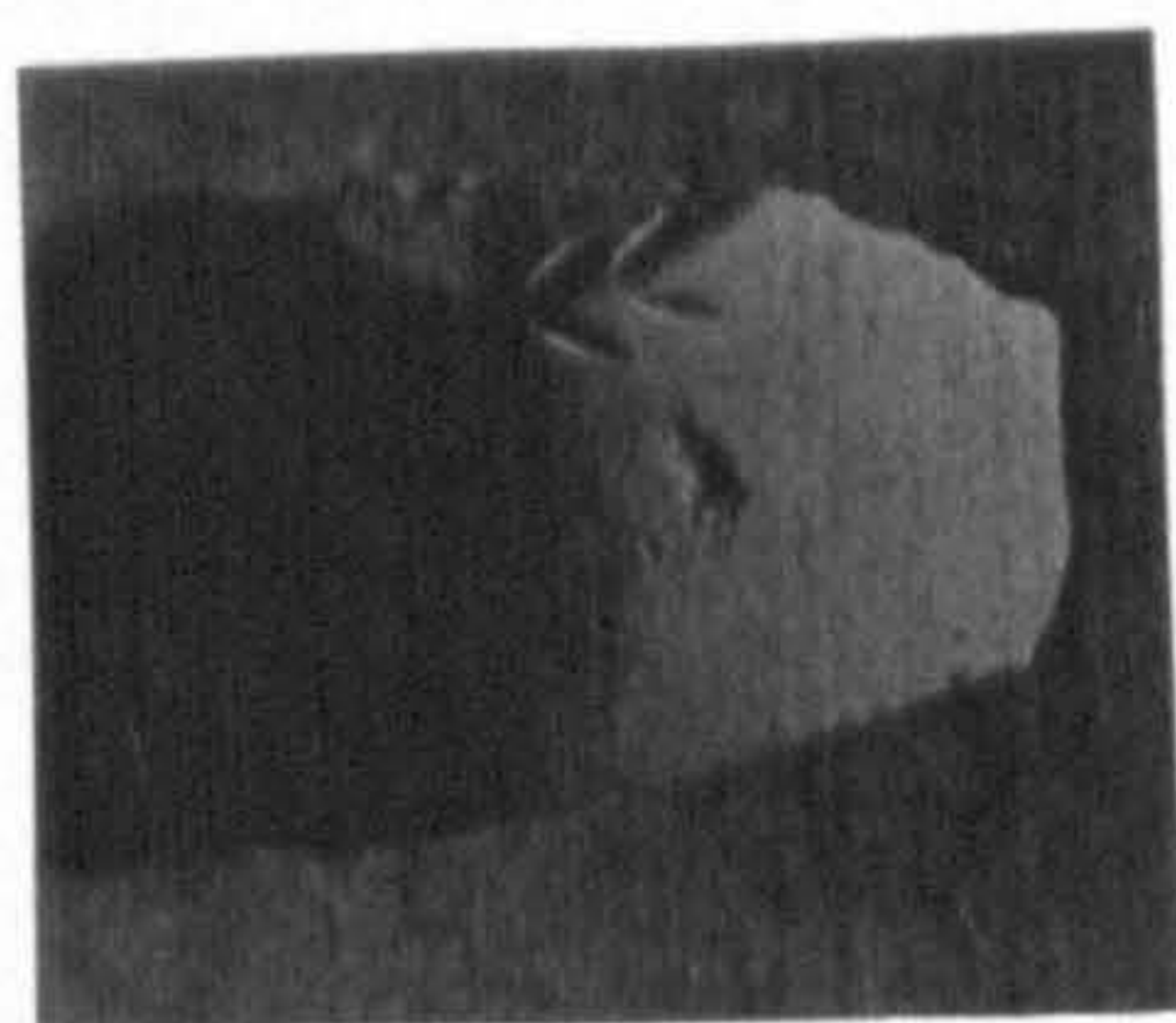


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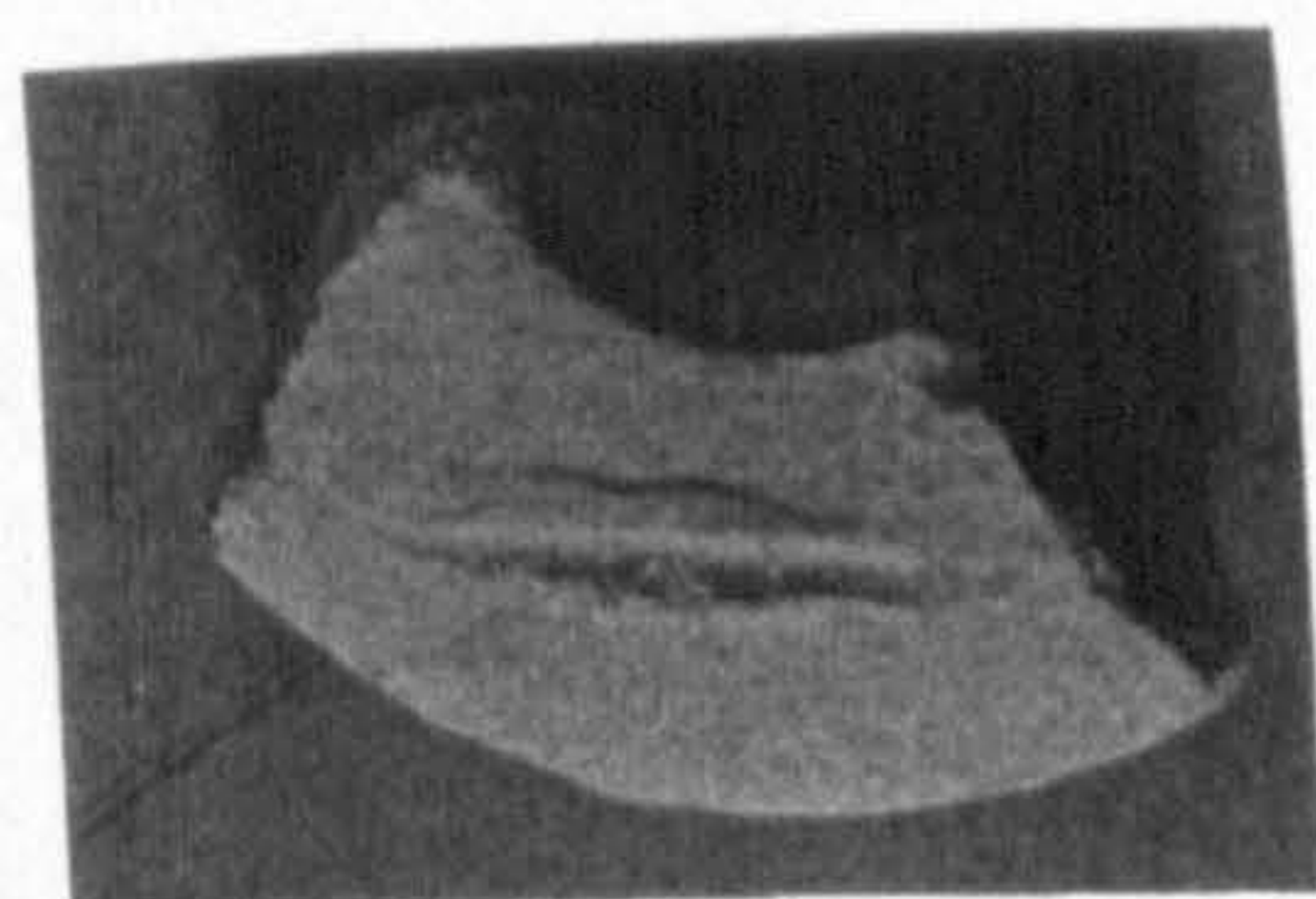
II. Phylakopi 1974-77 8-13. Various scales



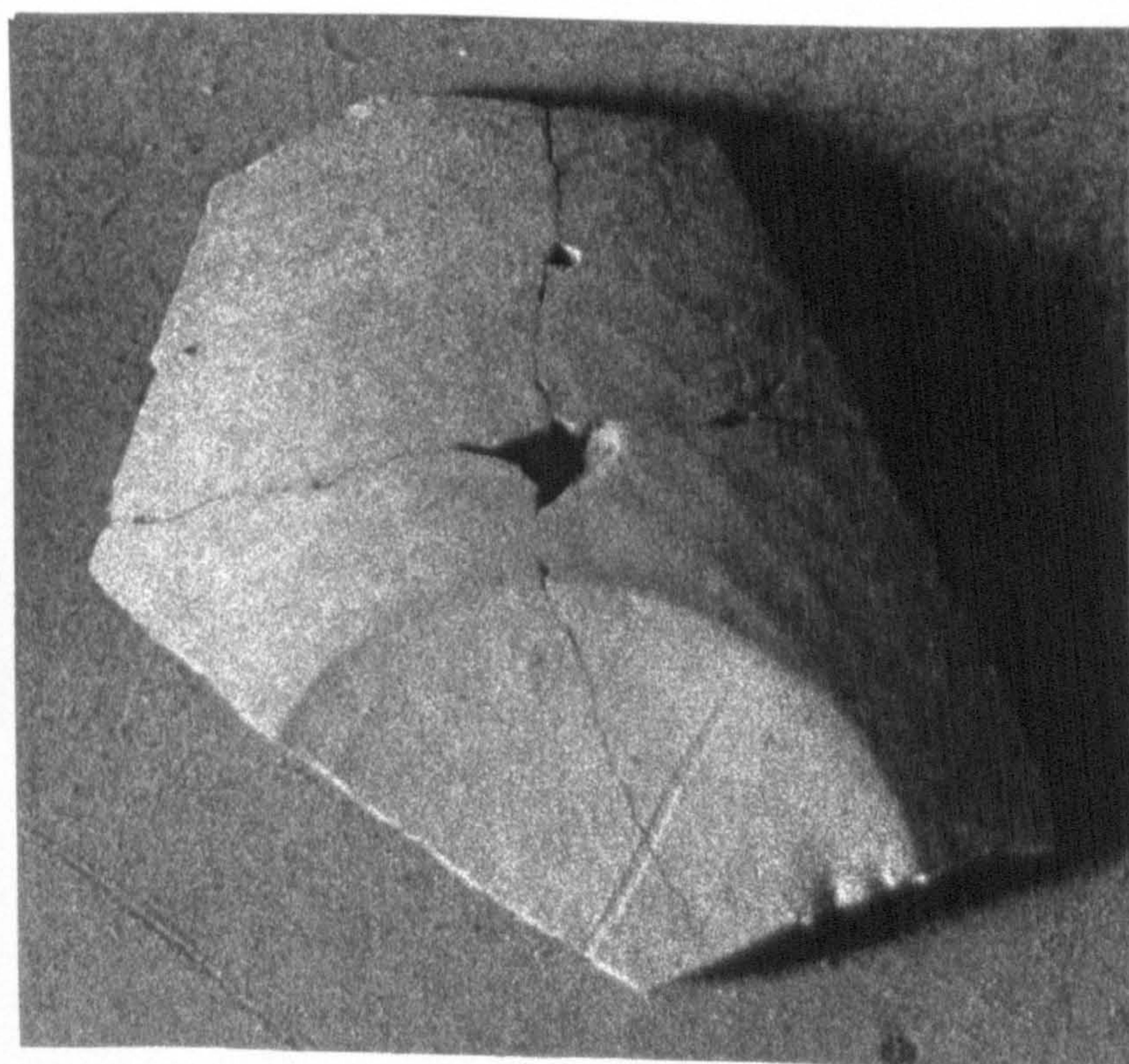
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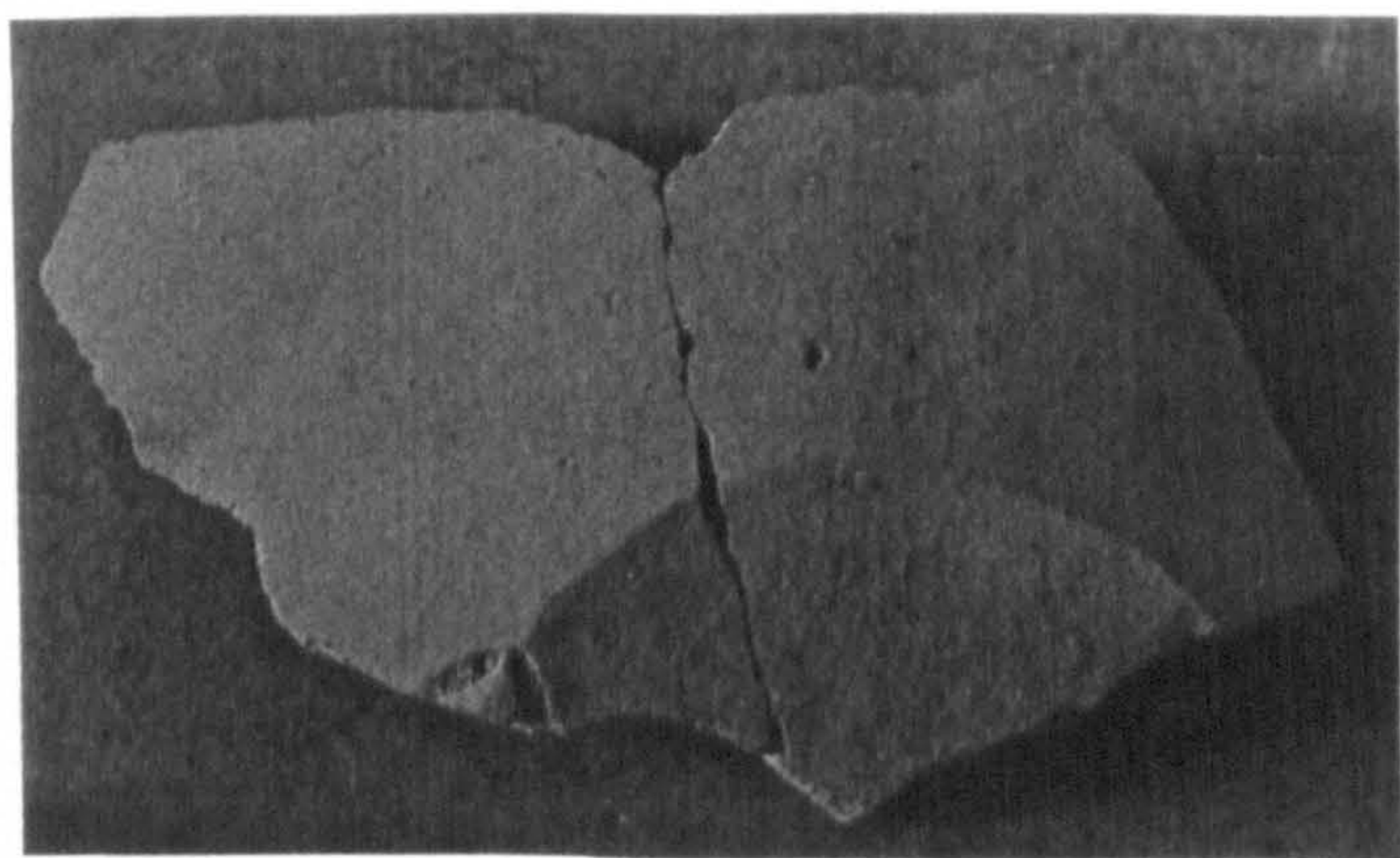
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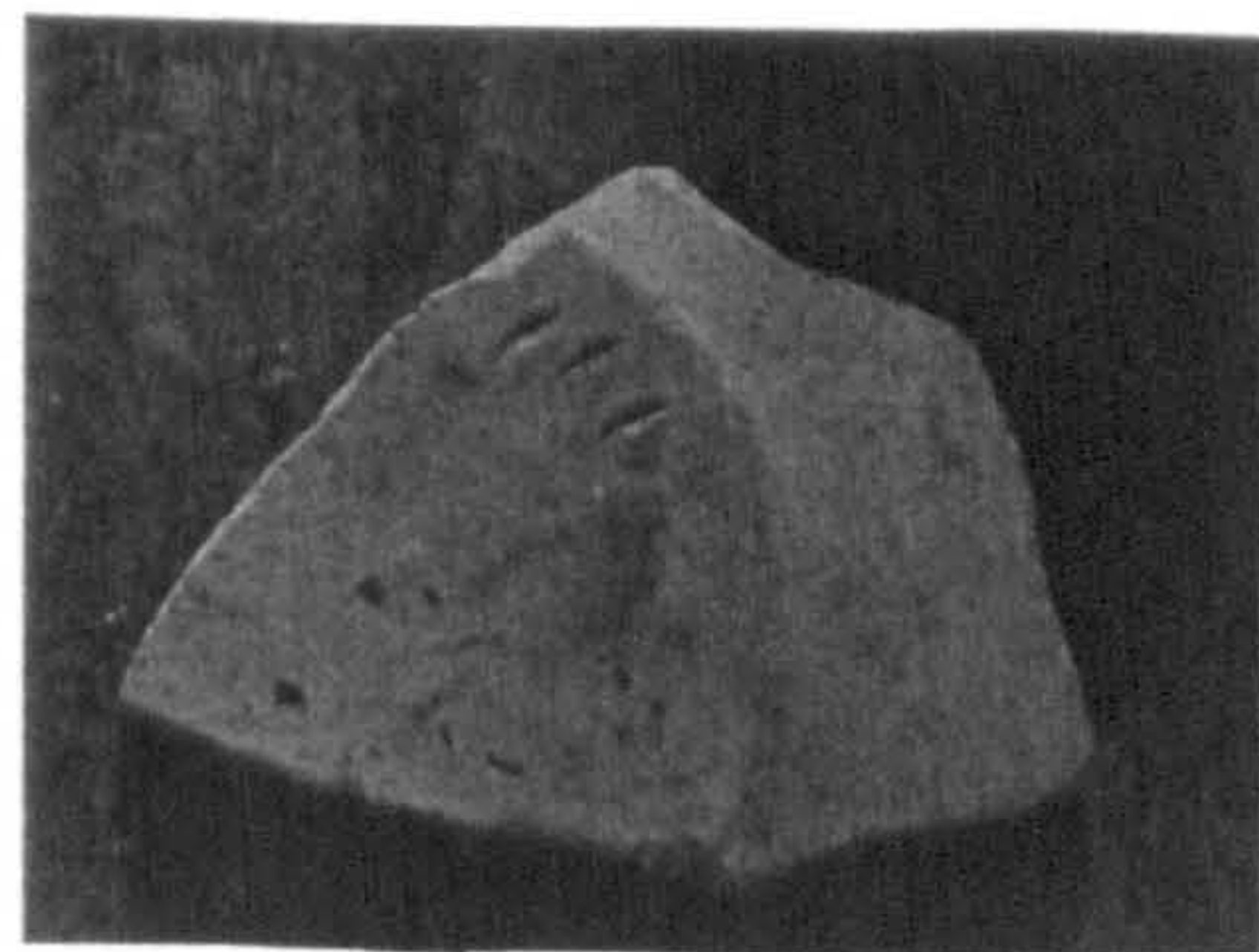
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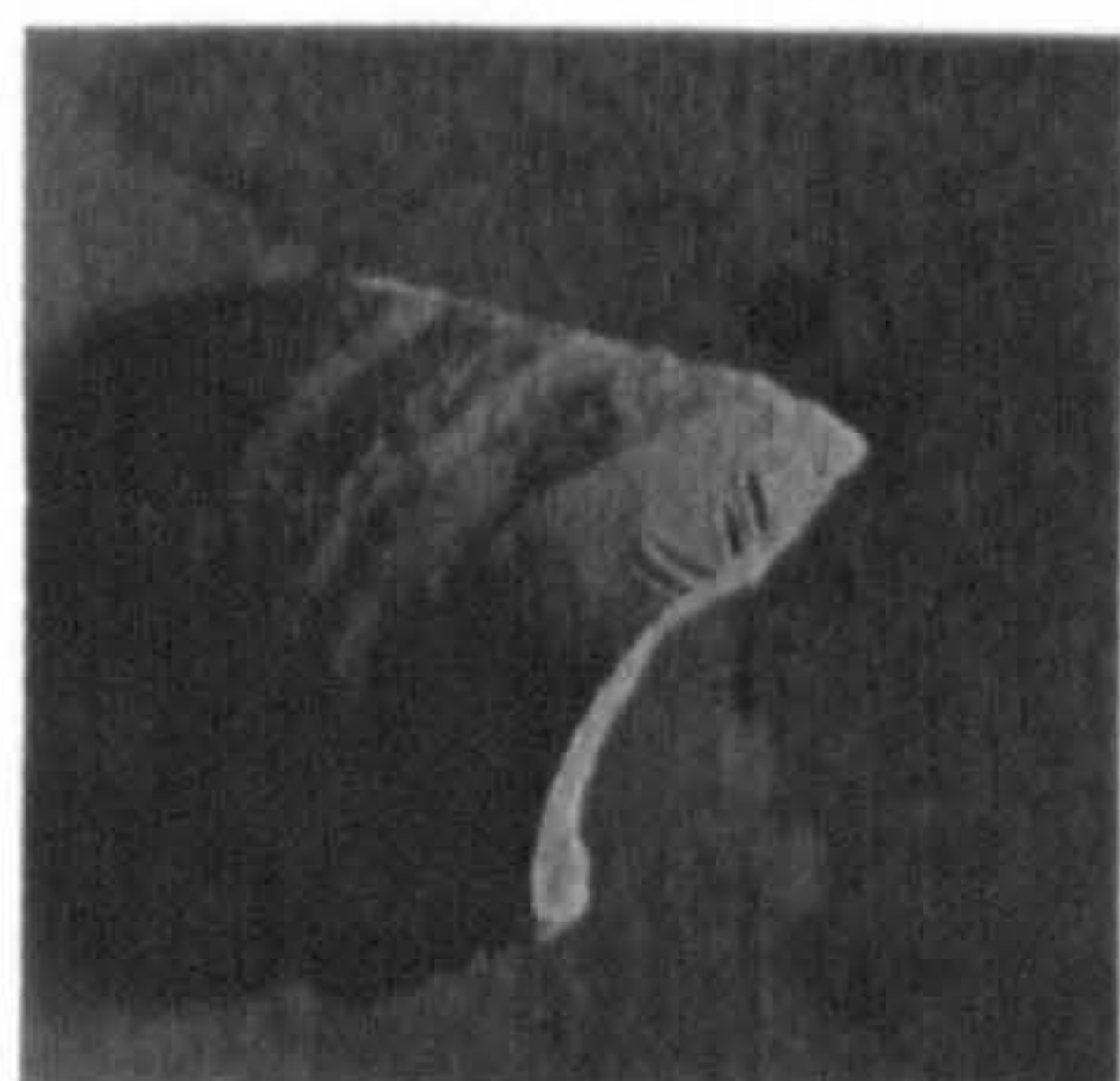
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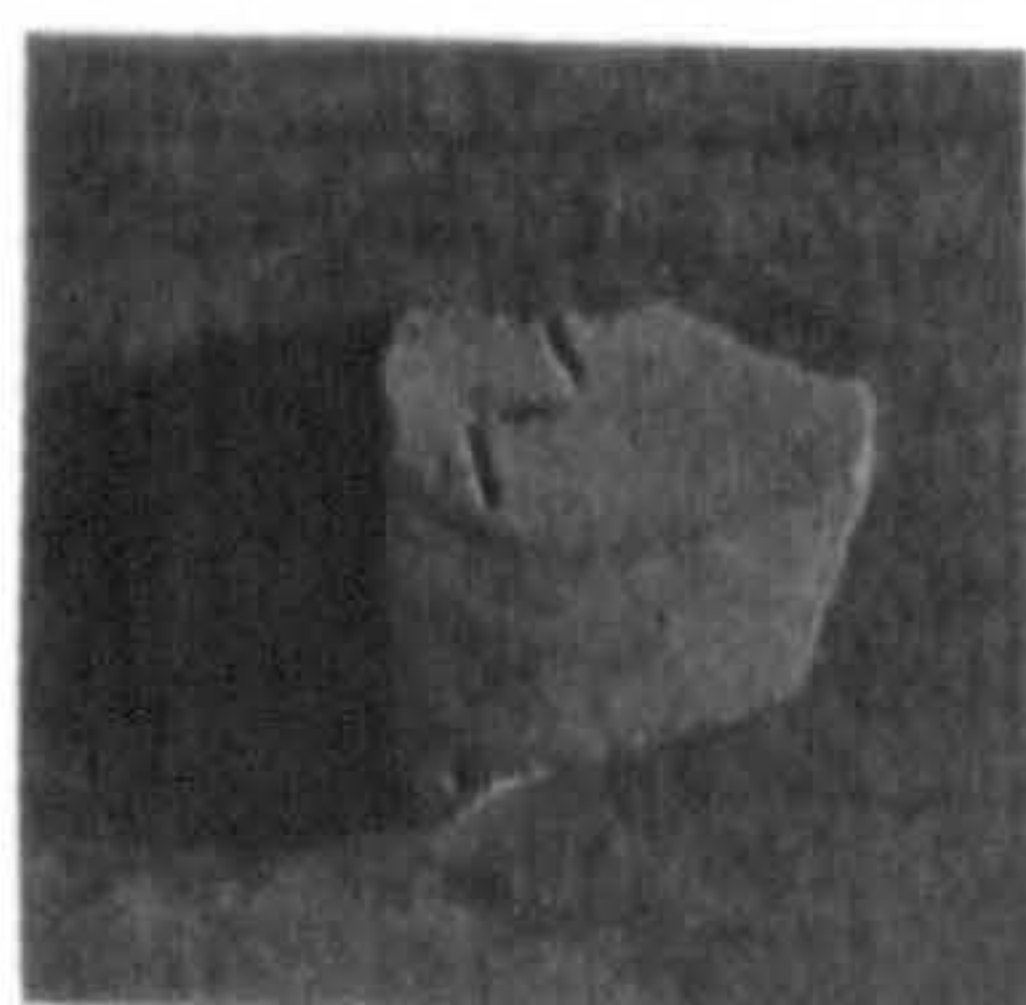
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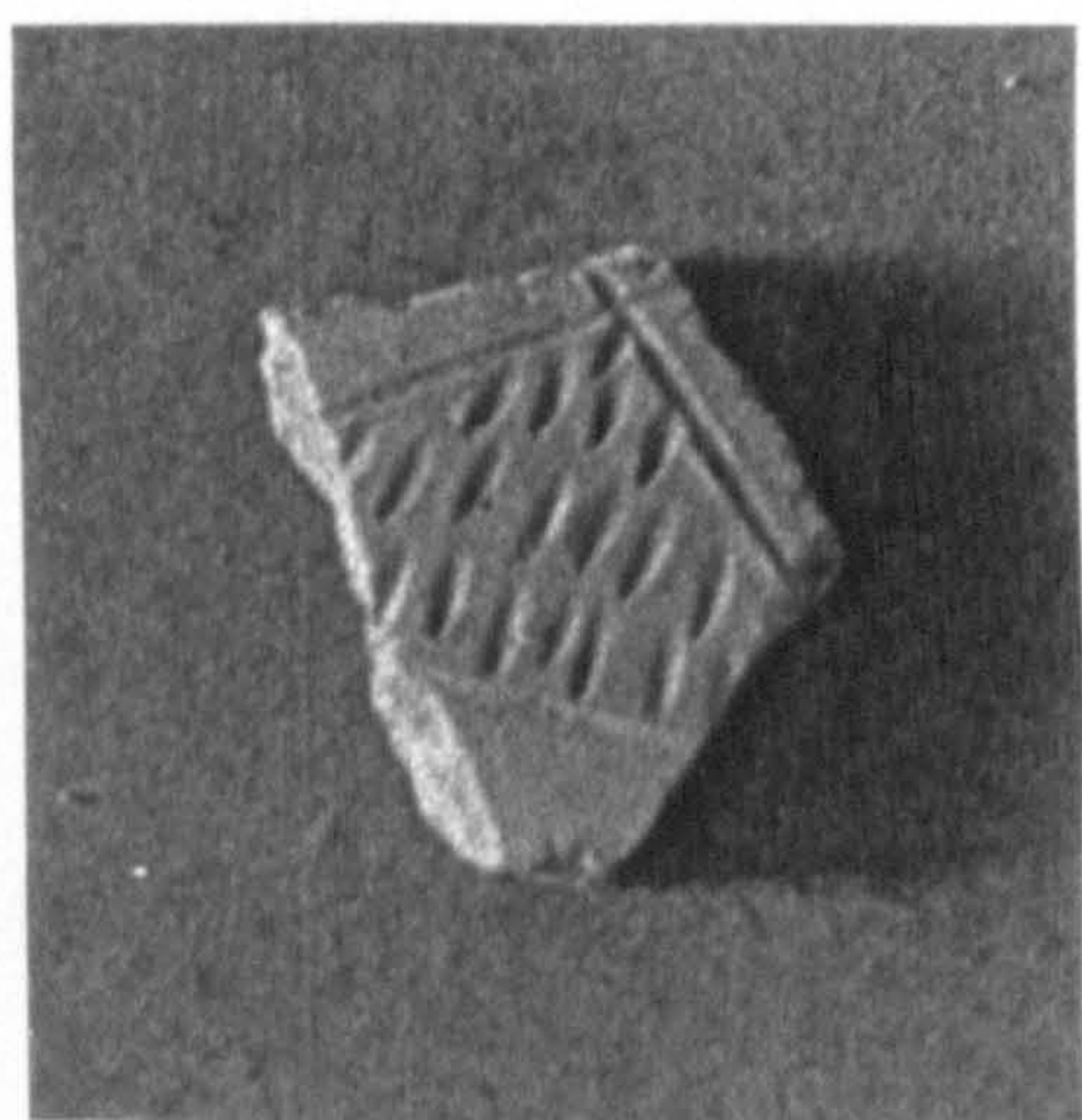
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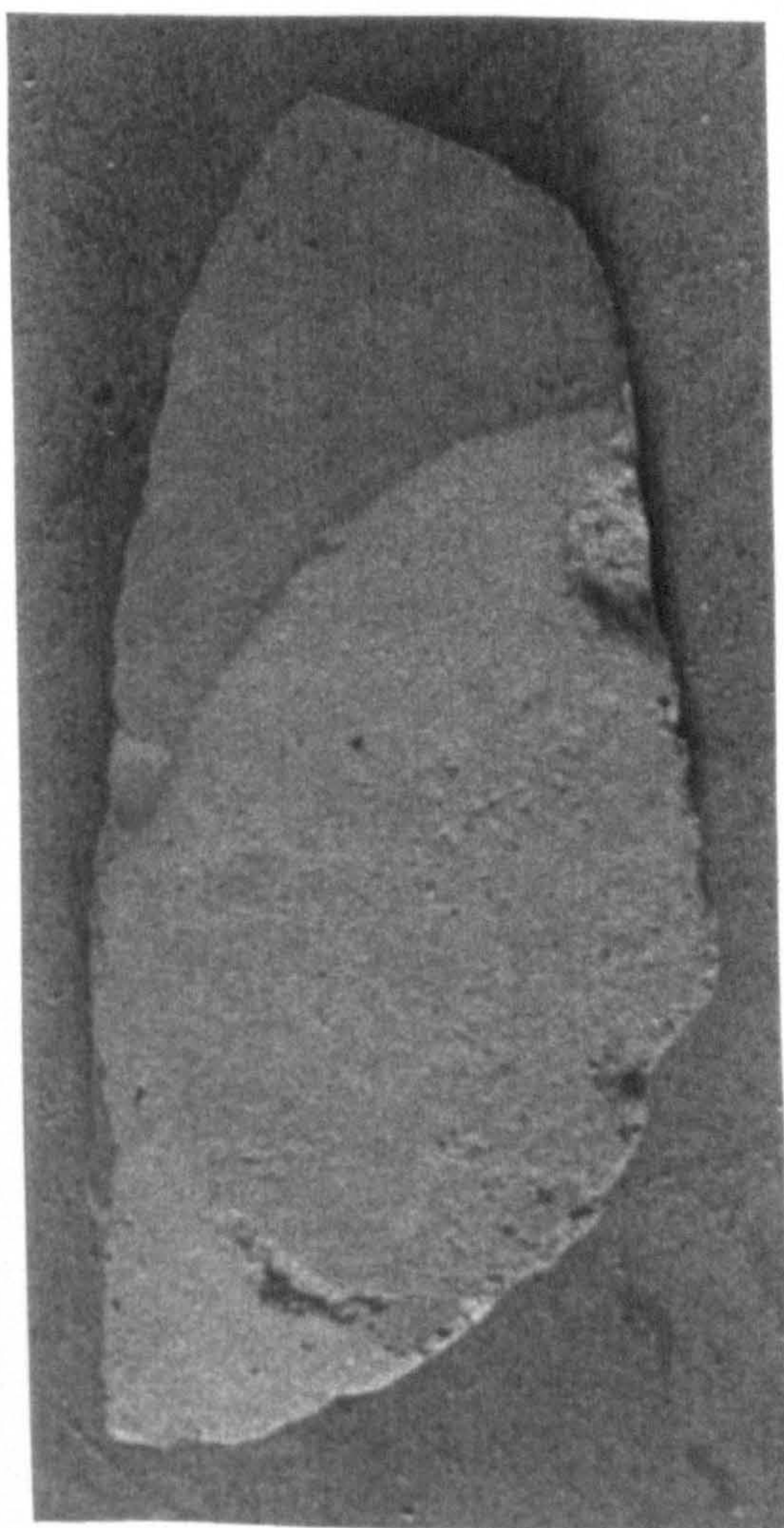
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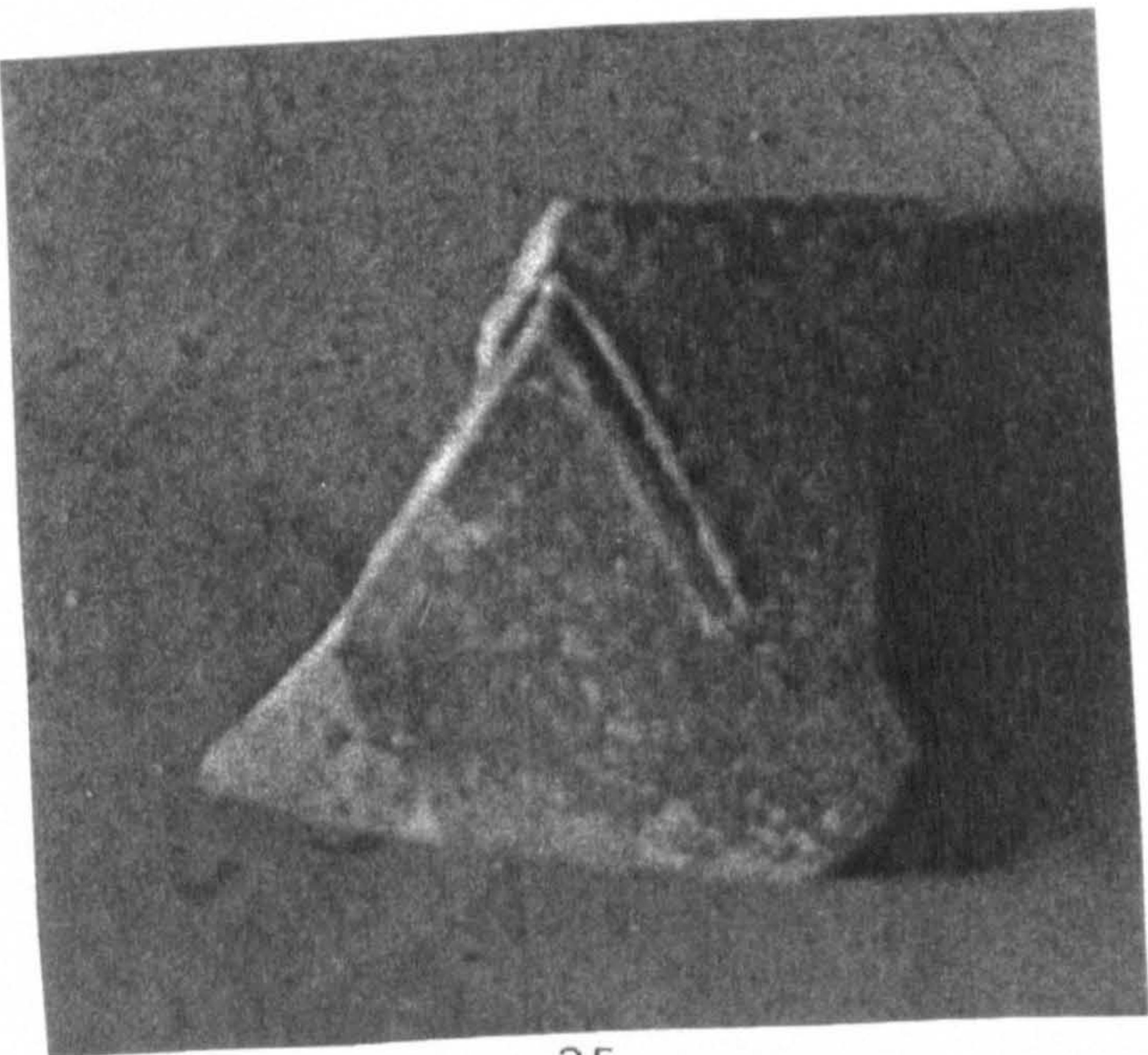


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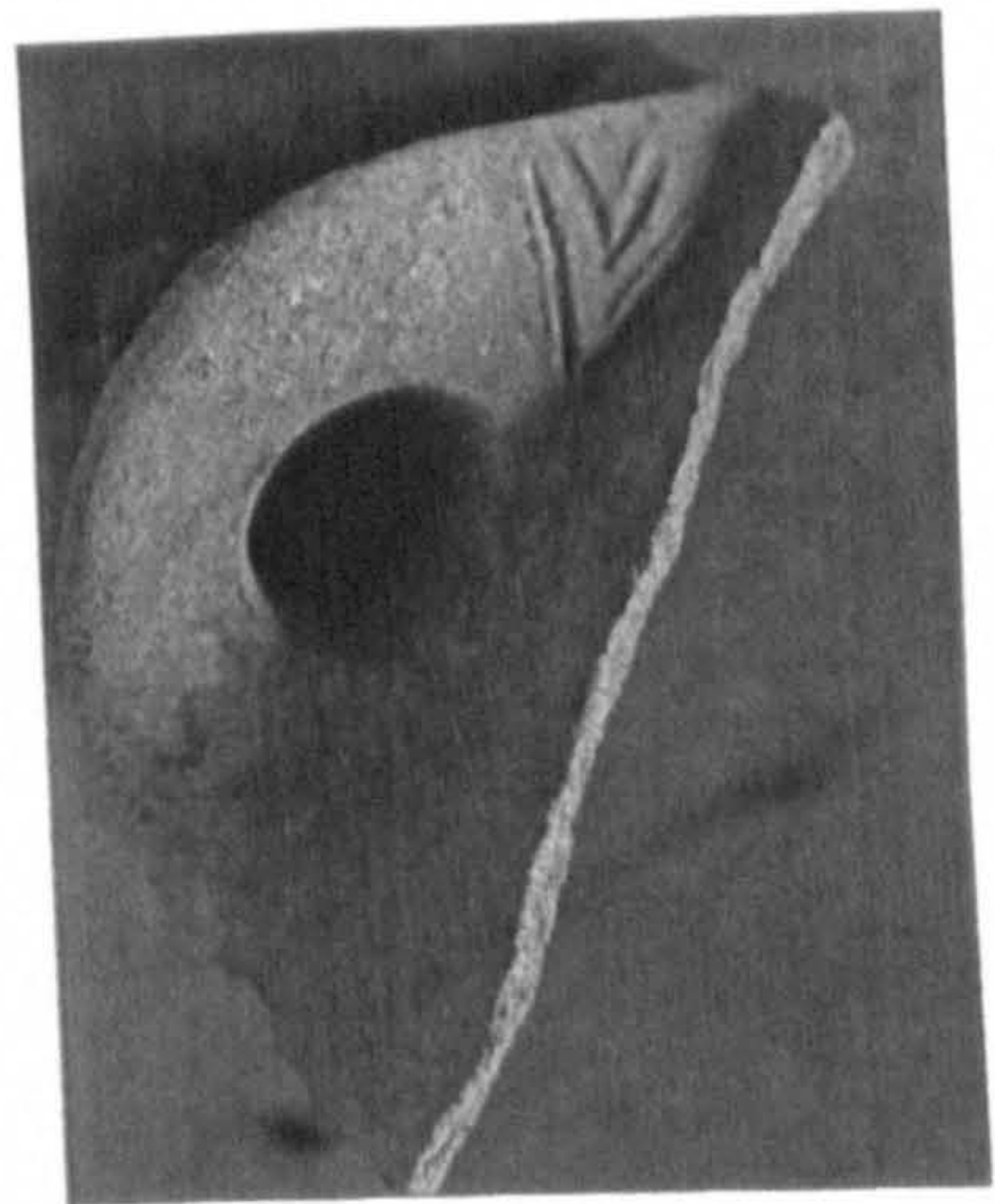


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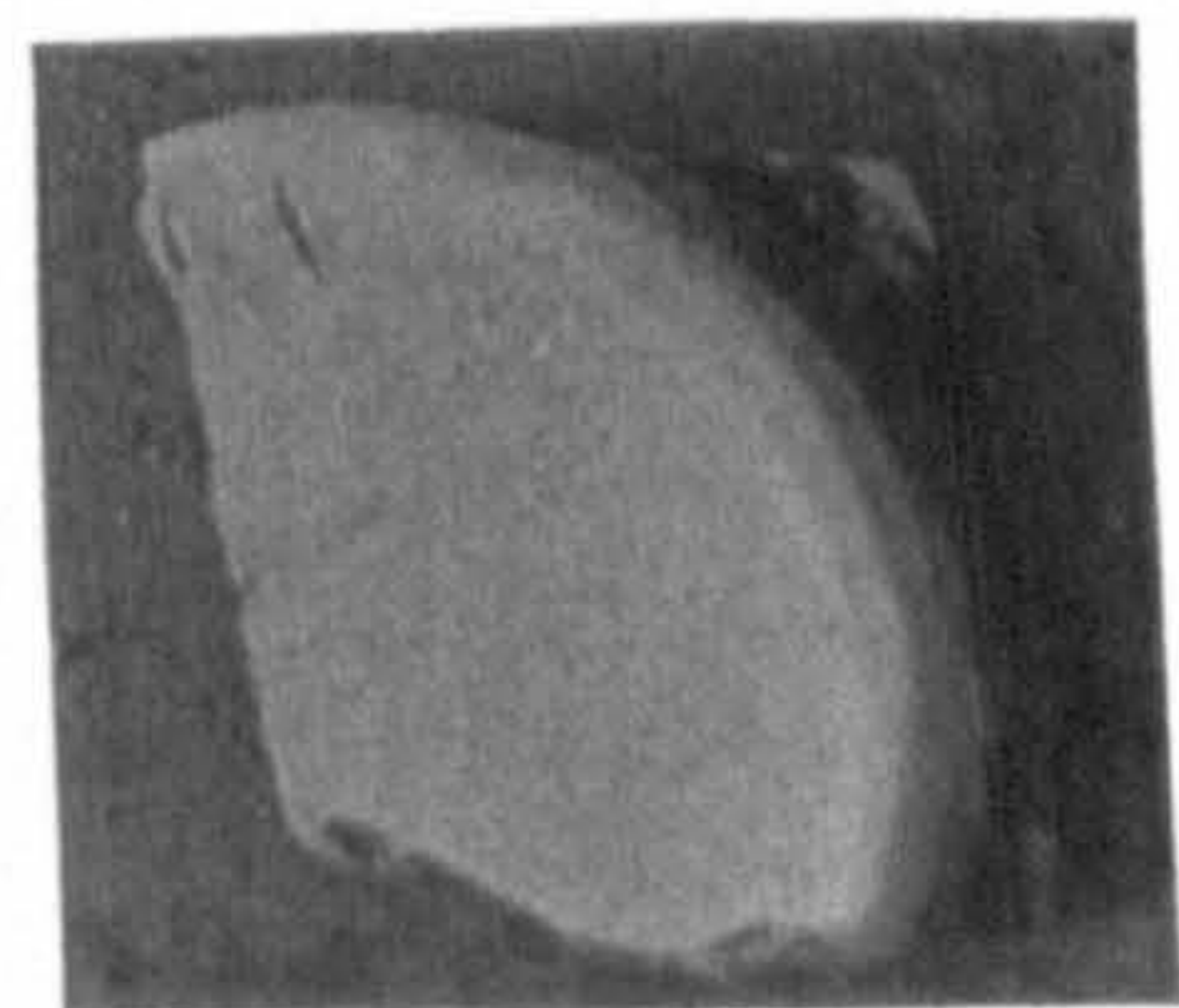
IV. Phylakopi 1974-77 18-22, 24. Various scales



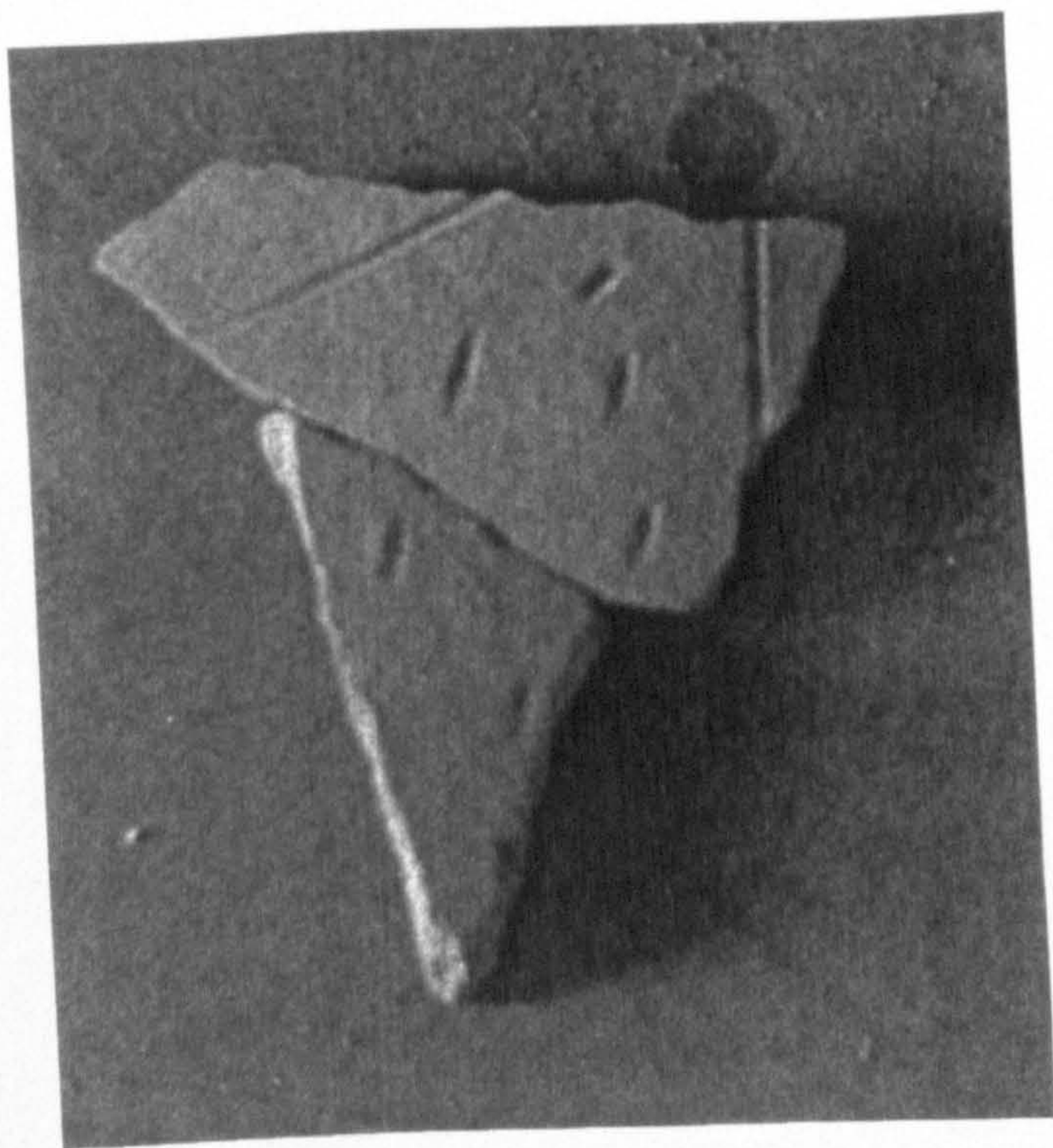
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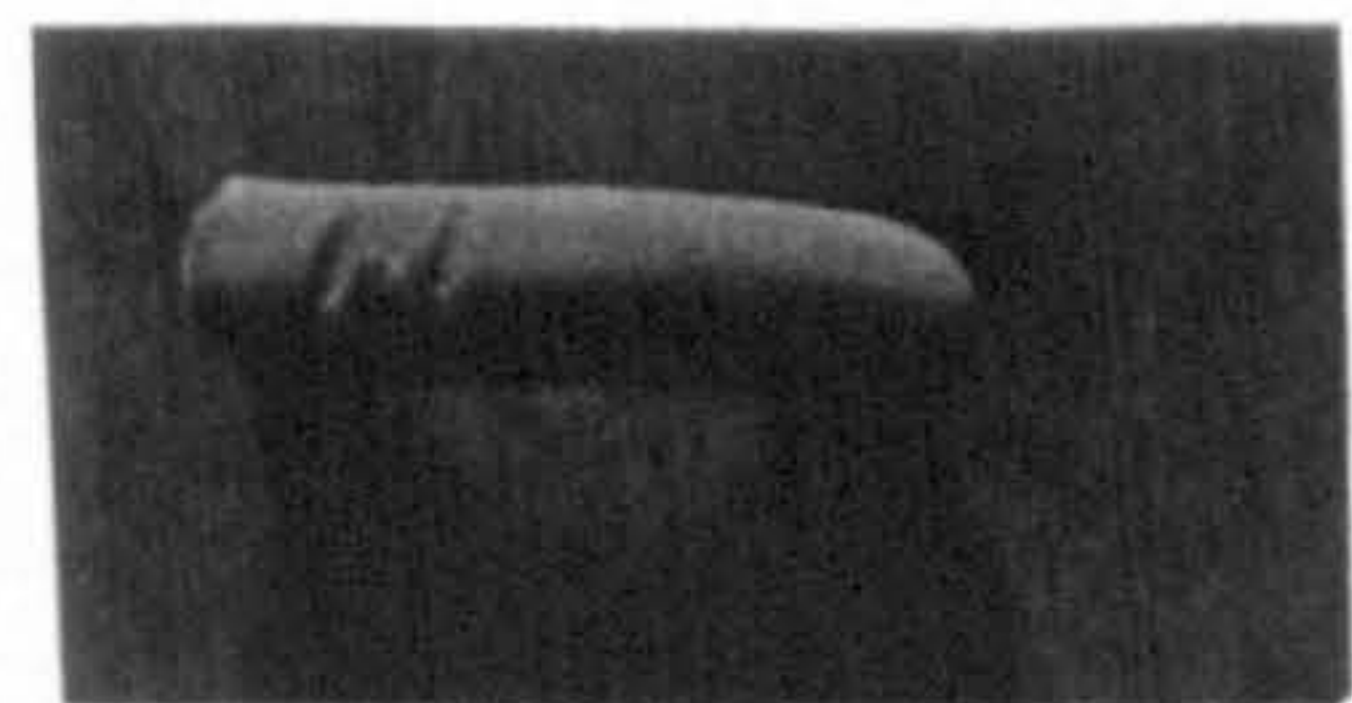
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28

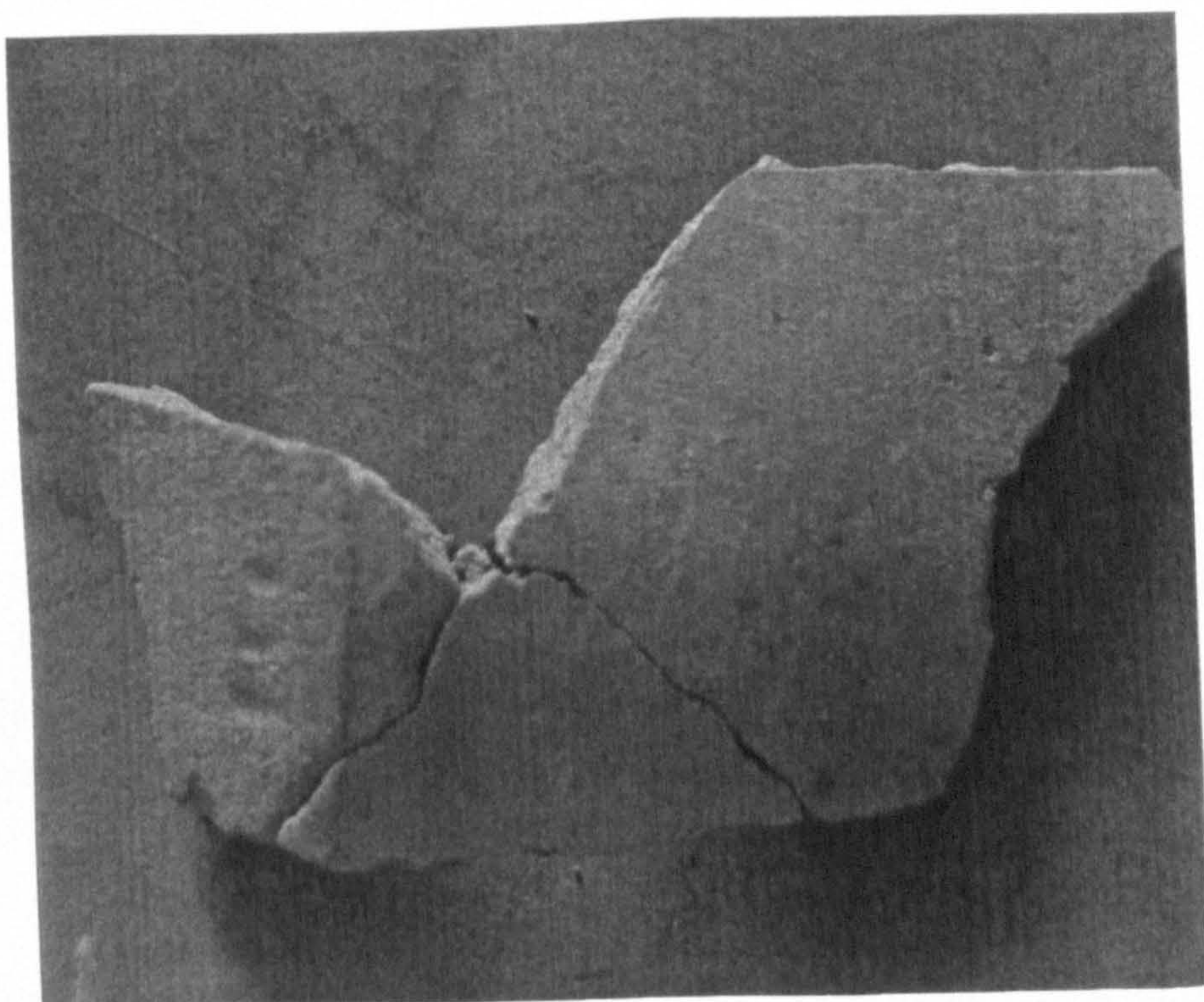


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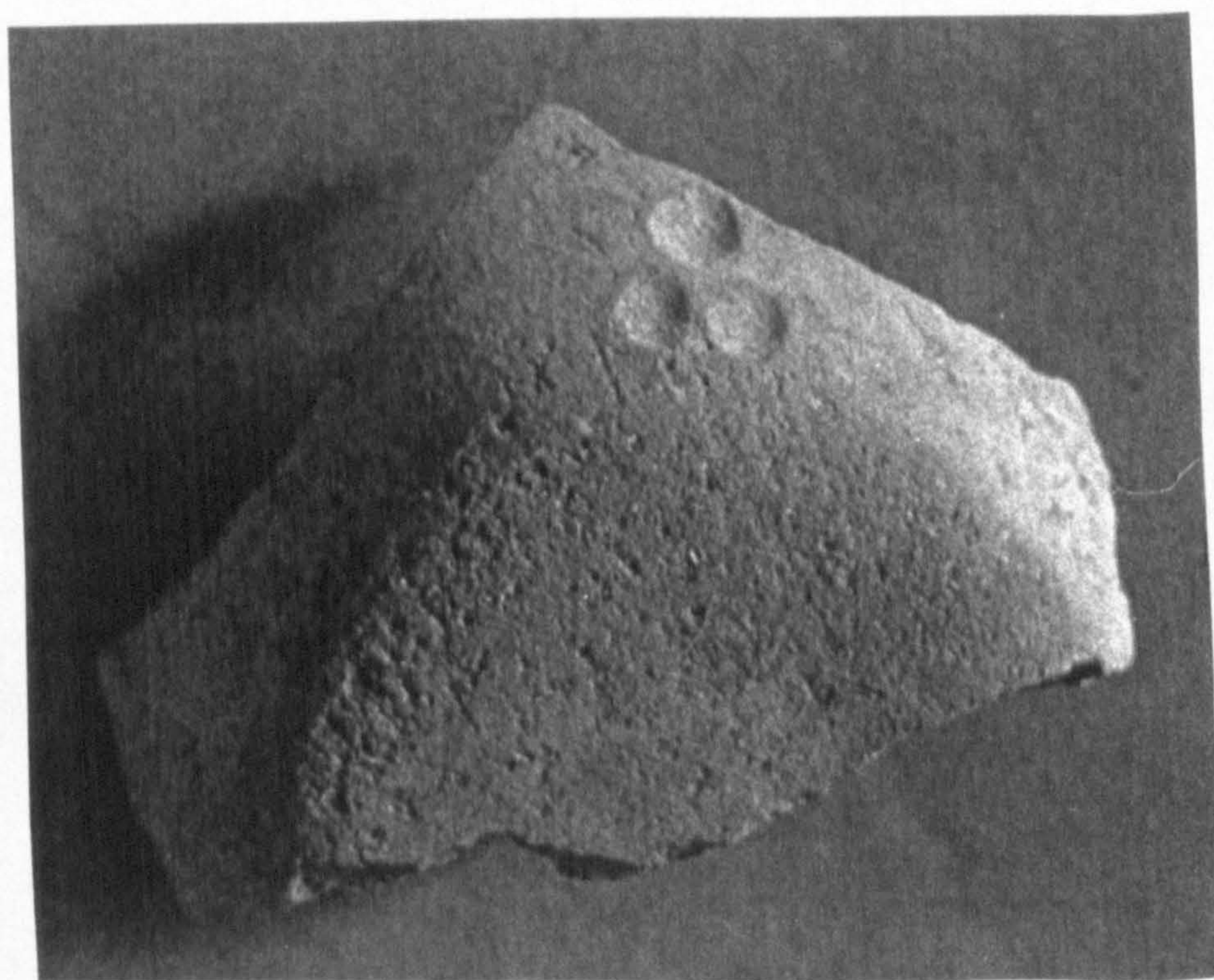


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V. Phylakopi 1974-77 25-28,30. Various scales

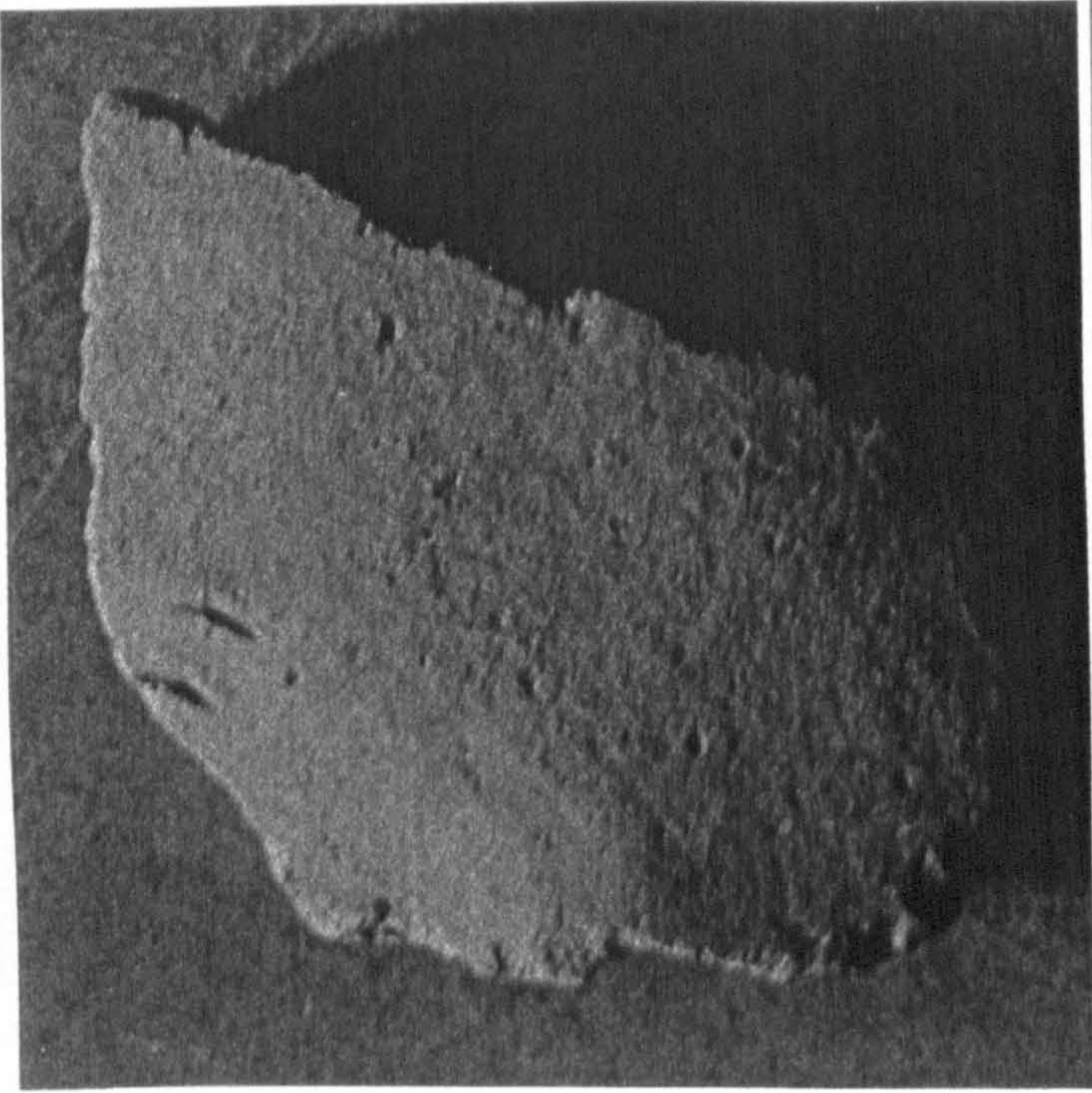


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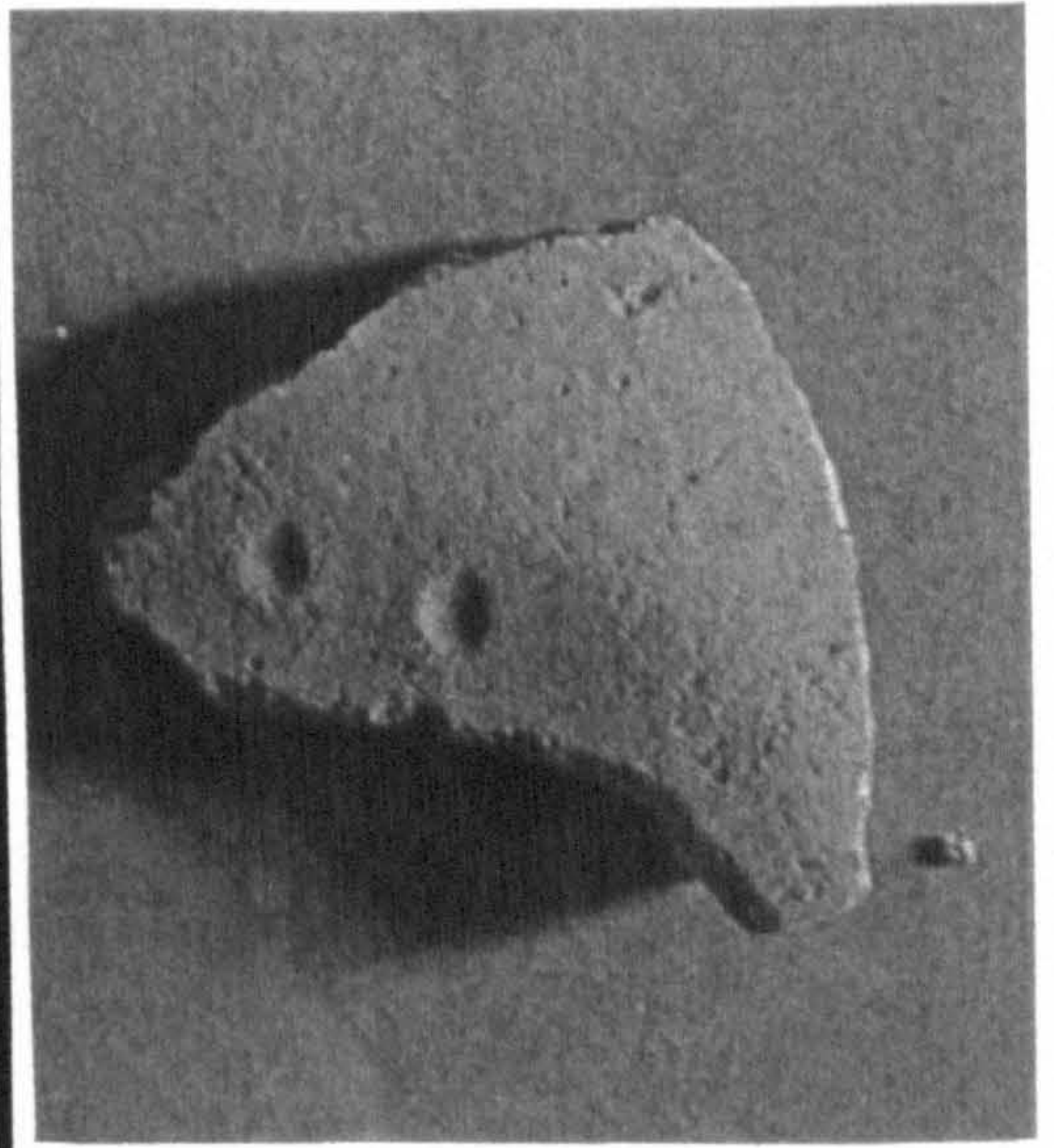


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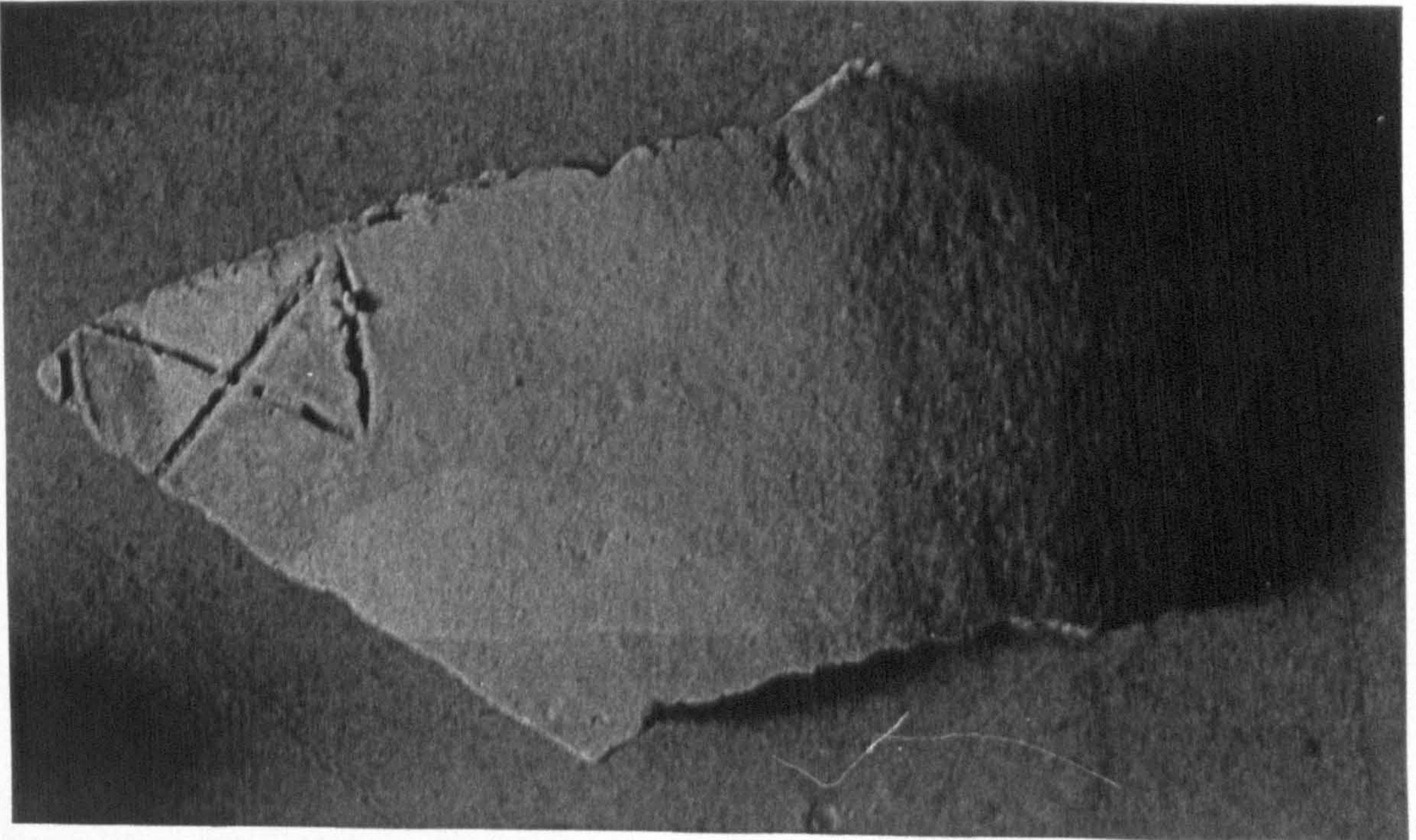
VI. Phylakopi 1974-77 29, 31. Various scales



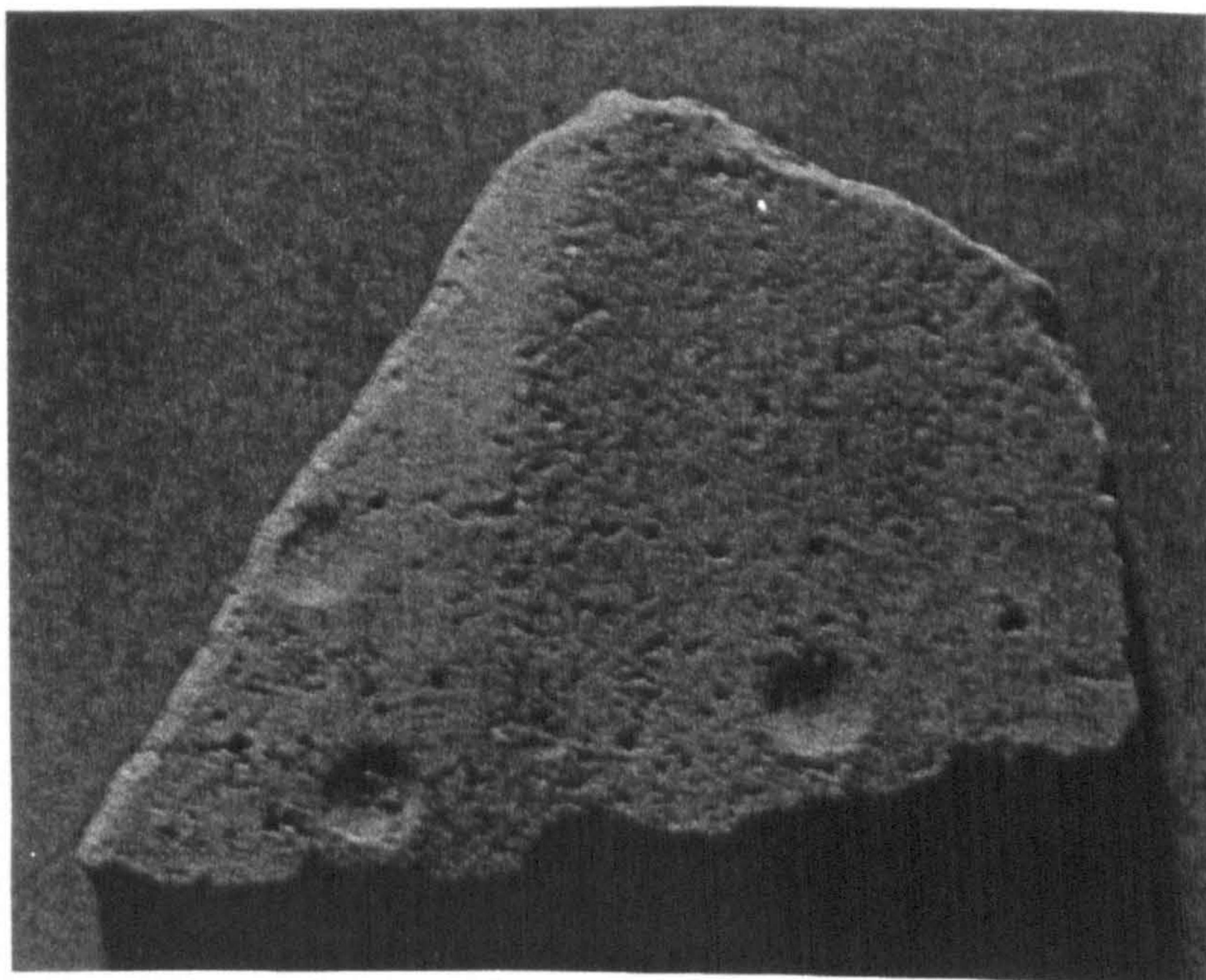
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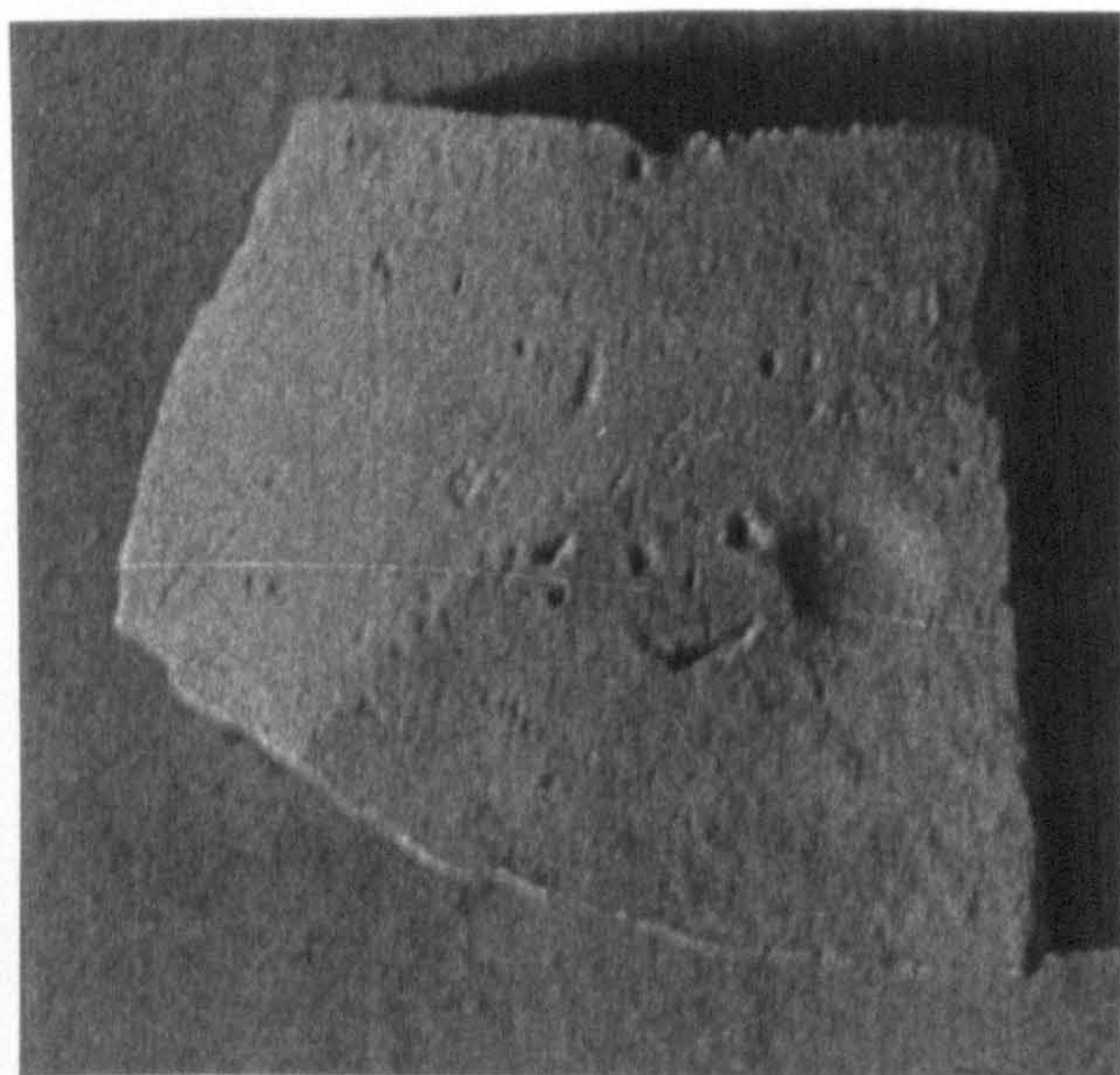
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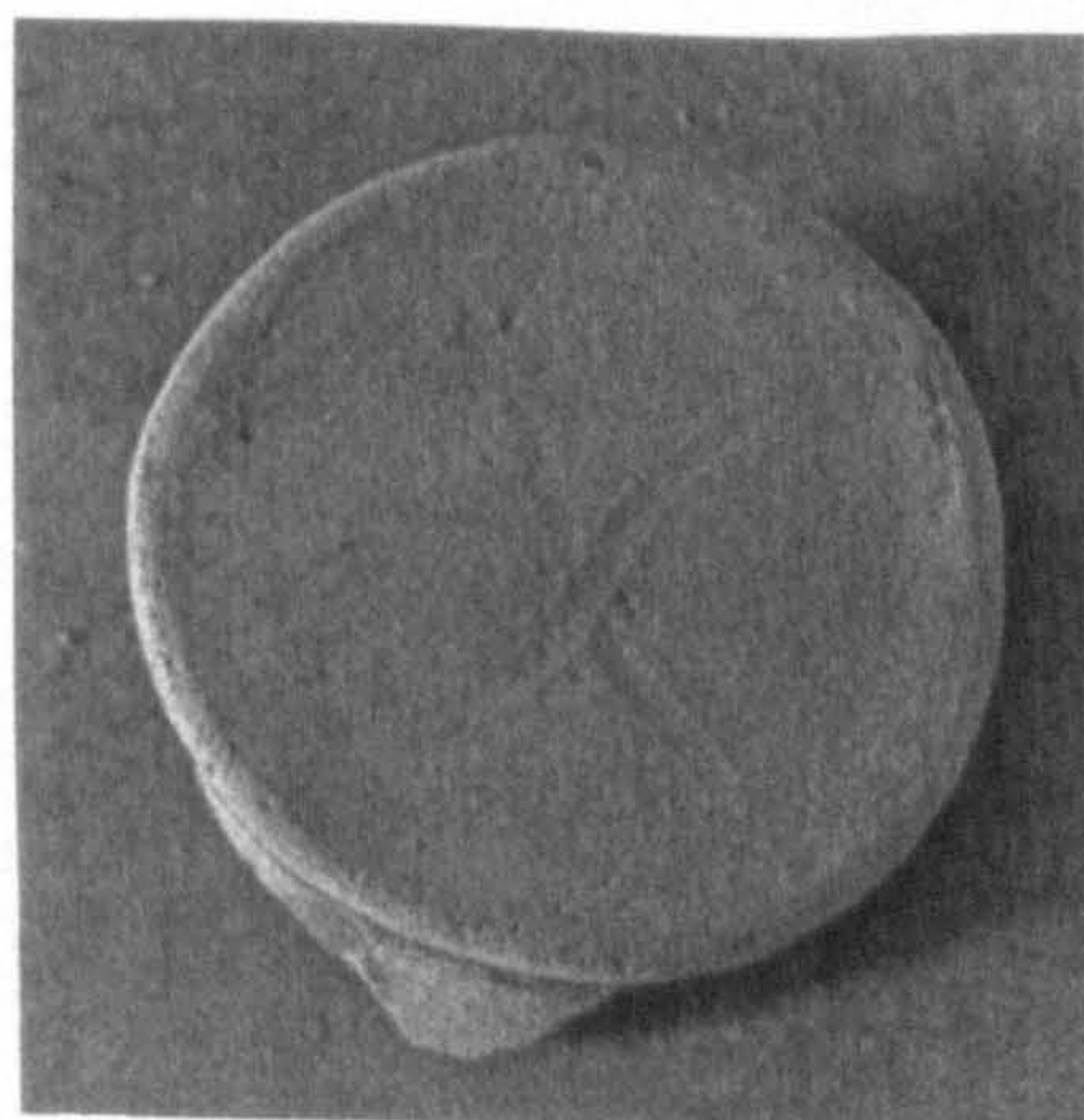
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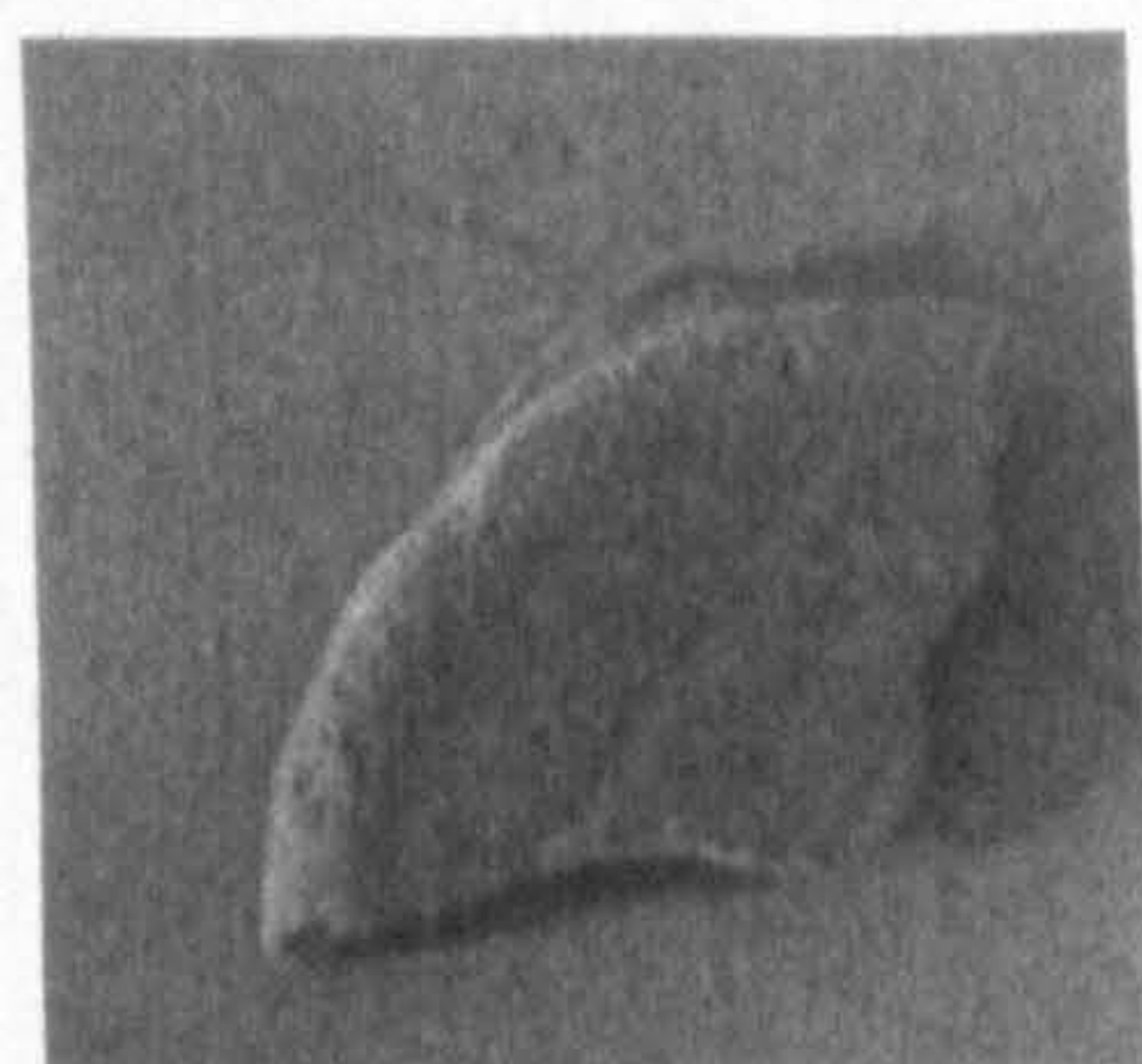
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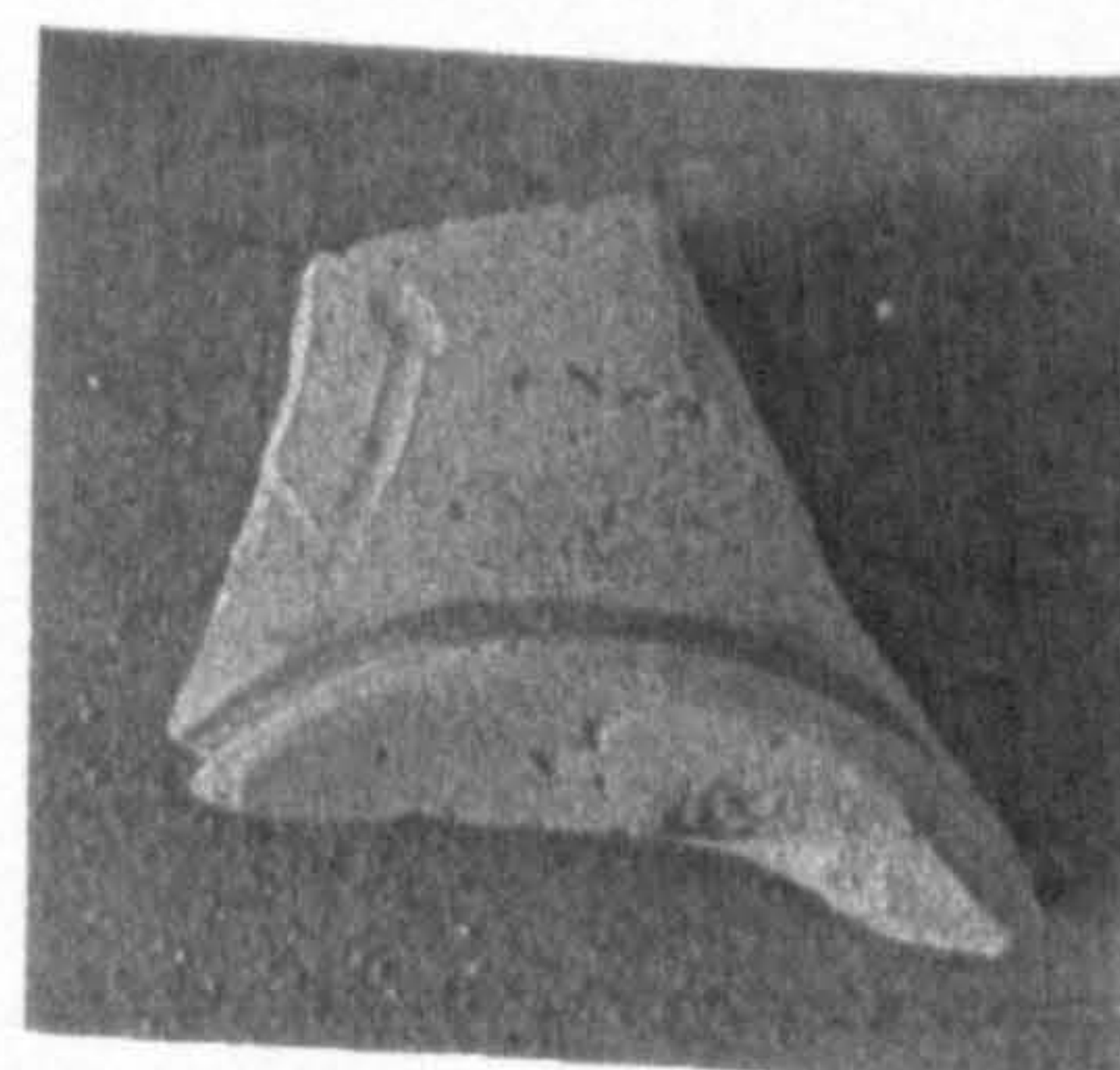
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38

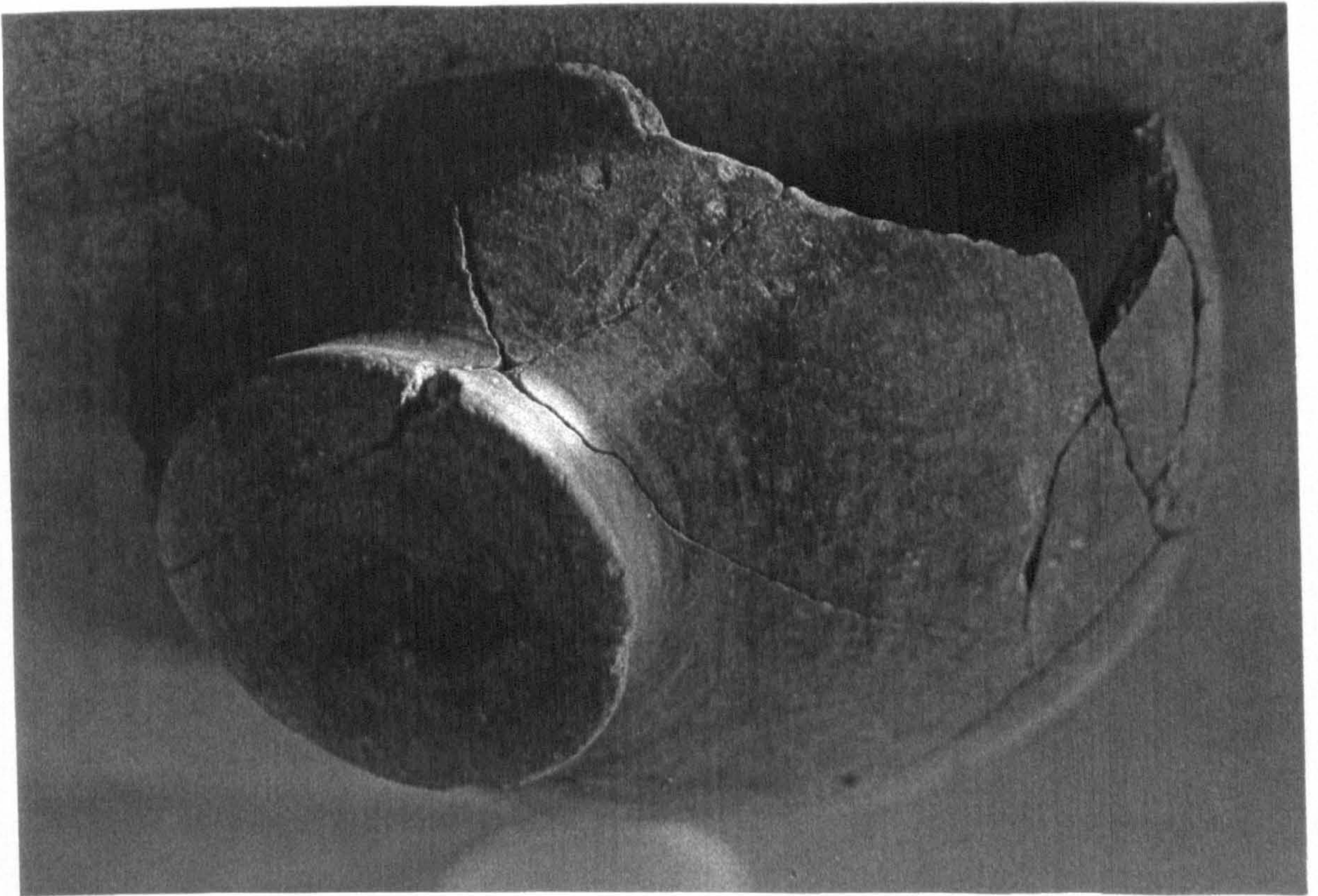


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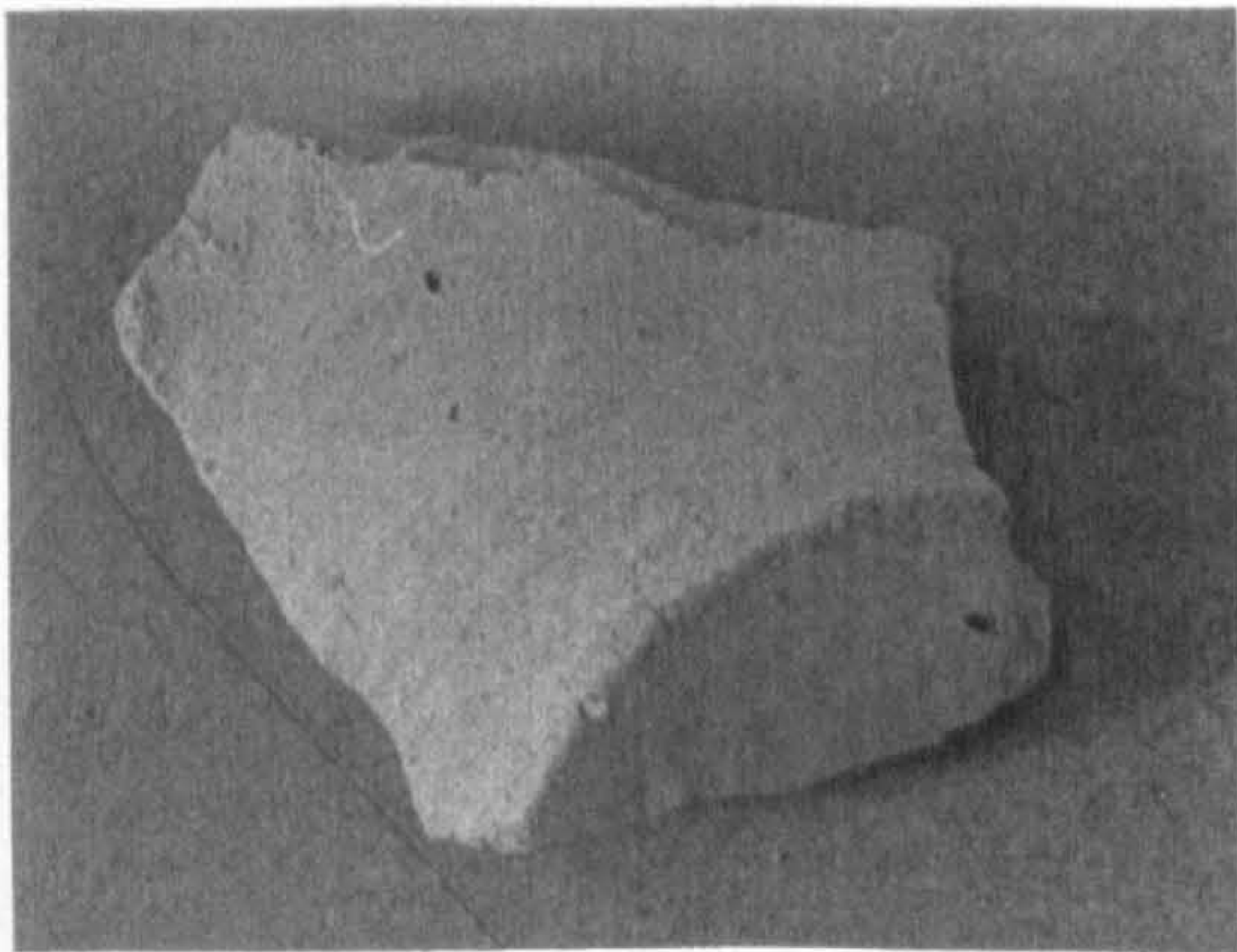


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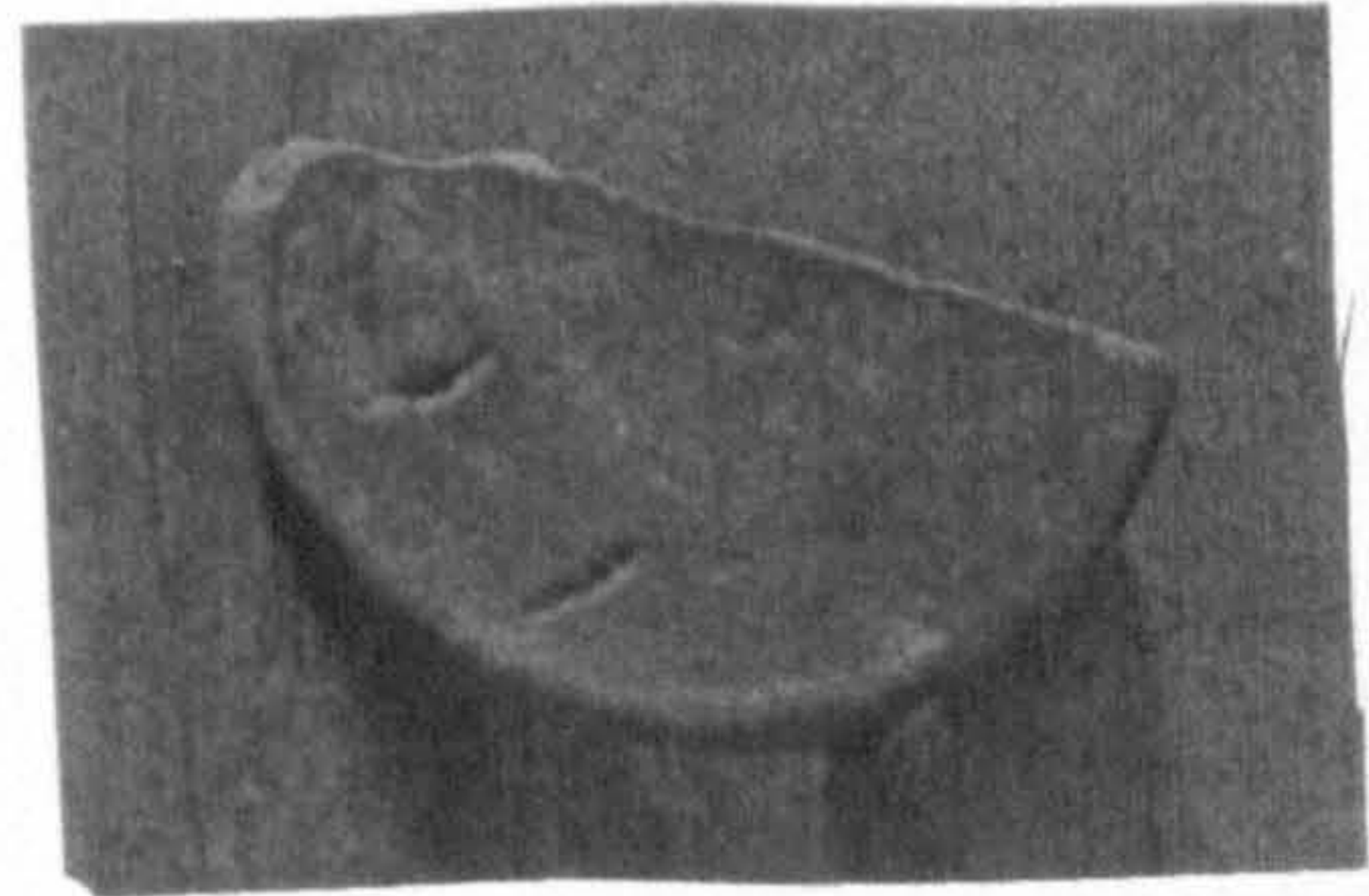
VIII. Phylakopi 1974-77 35, 36, 38-40. various scales



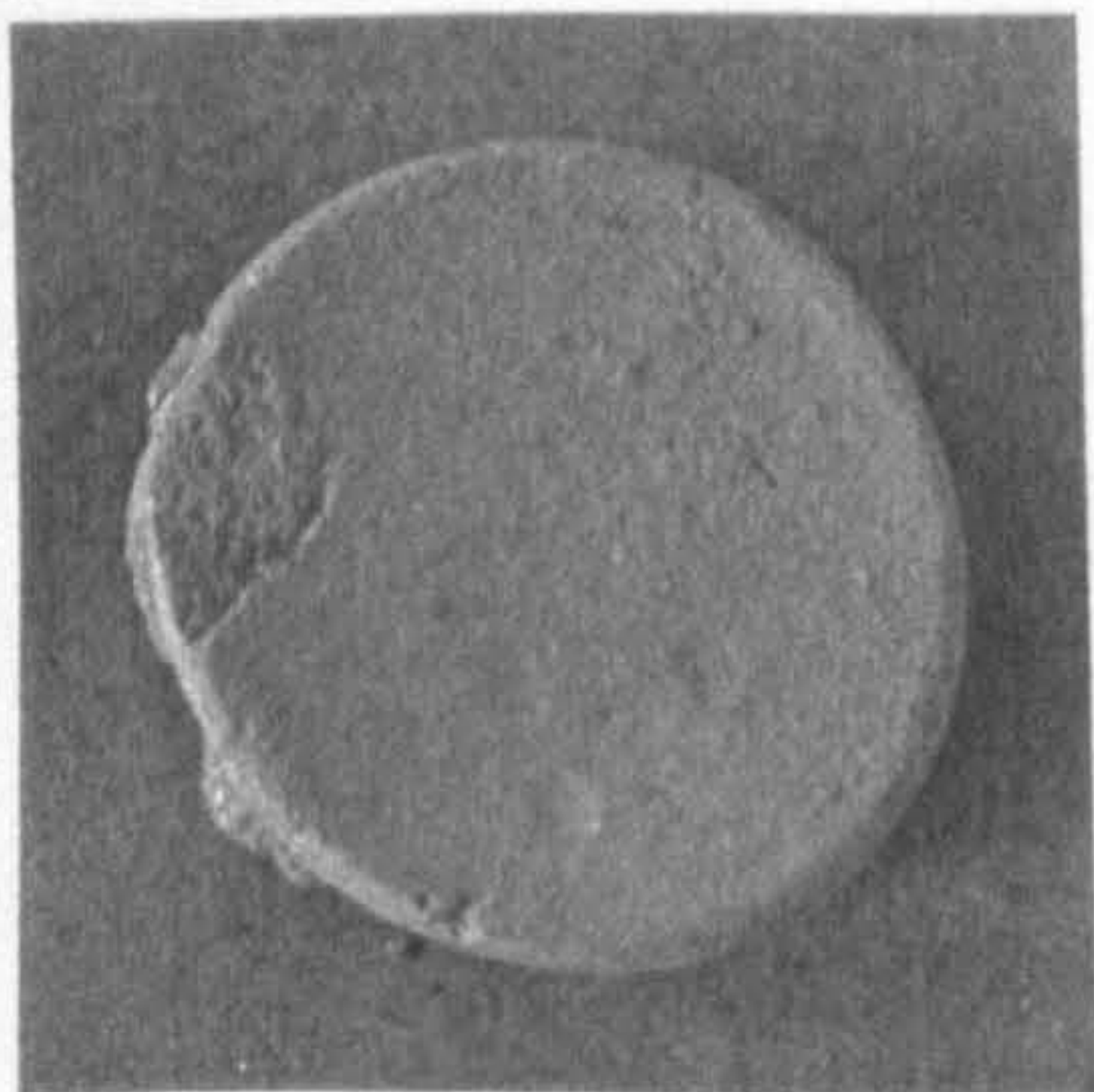
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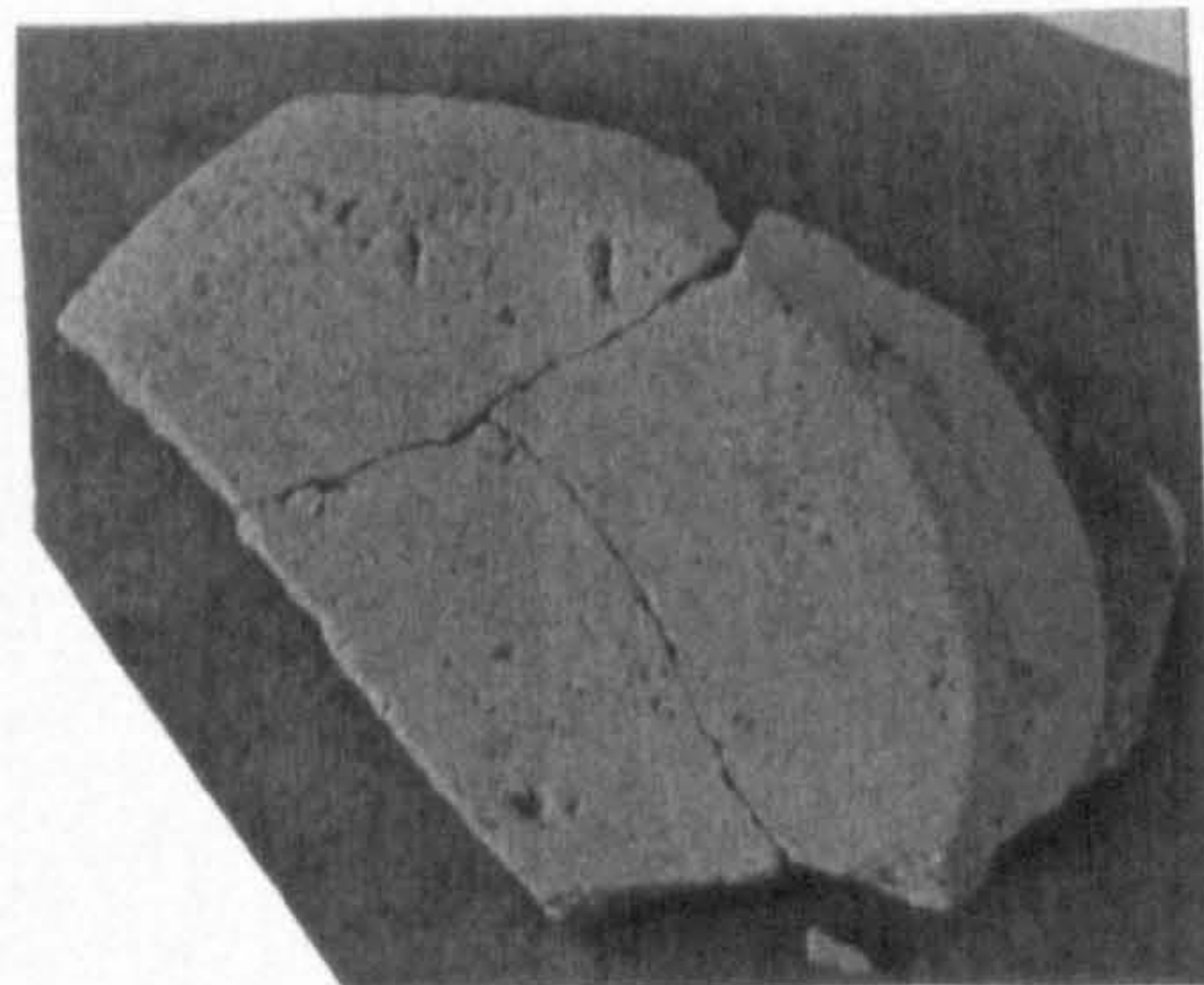
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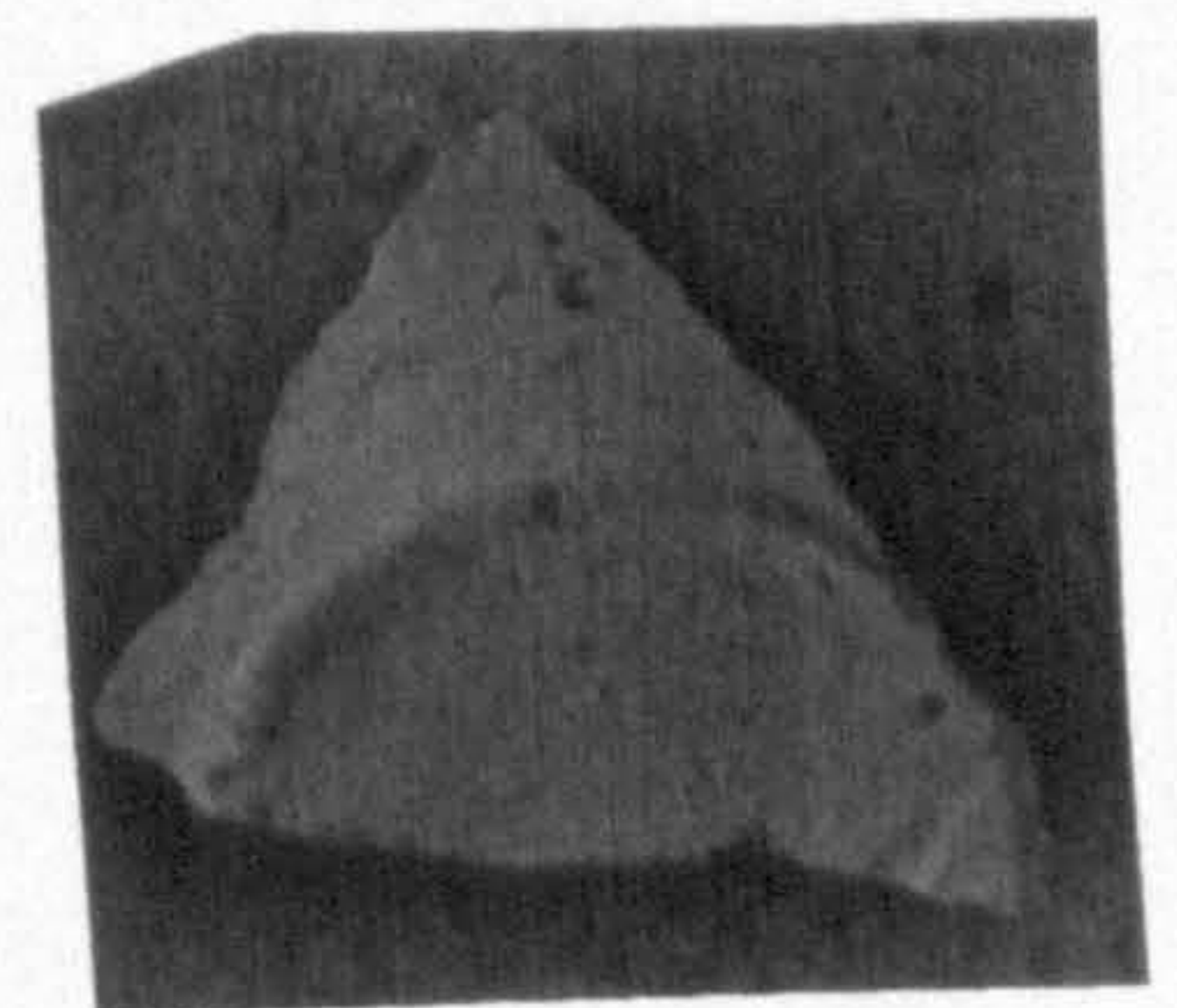
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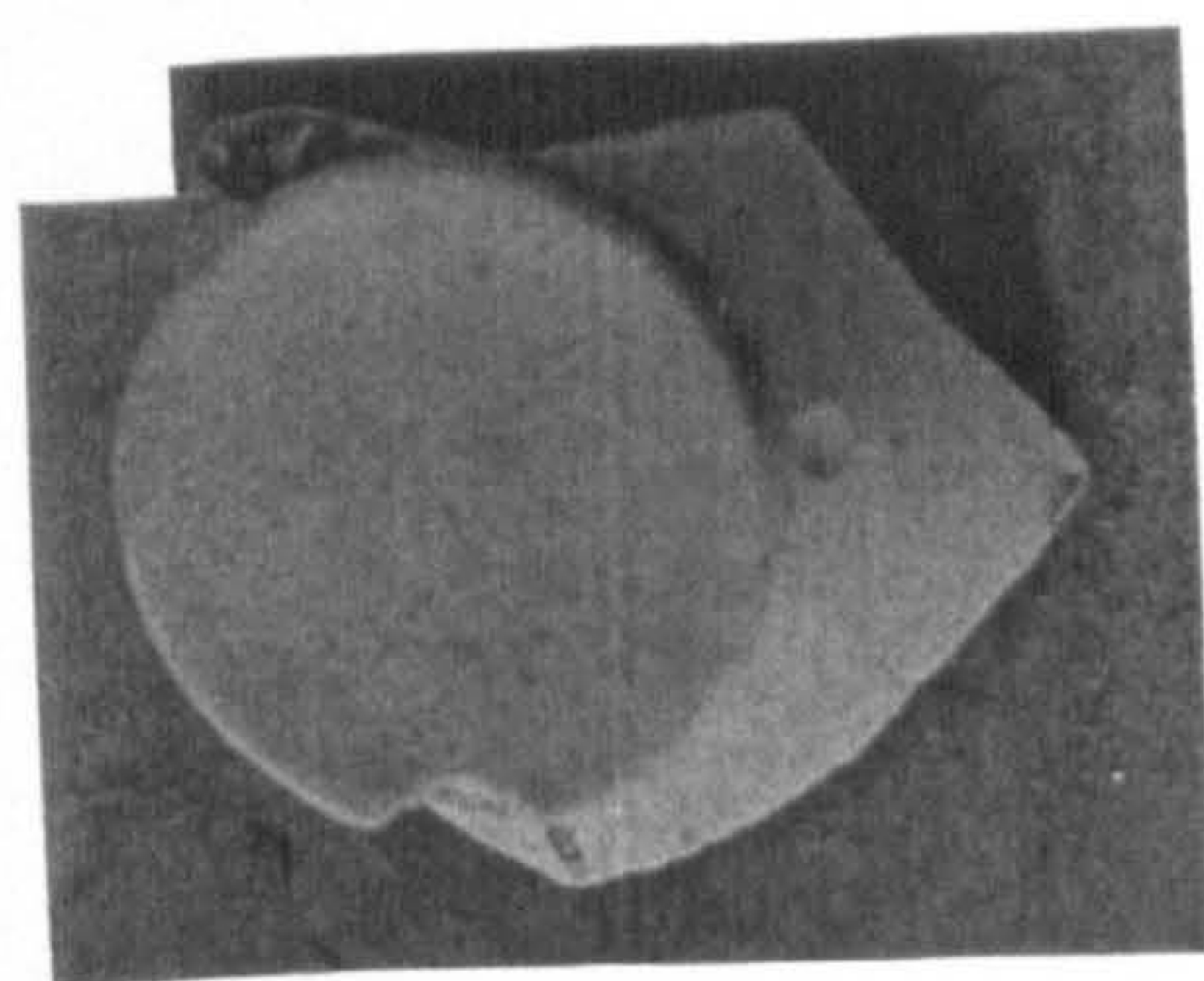
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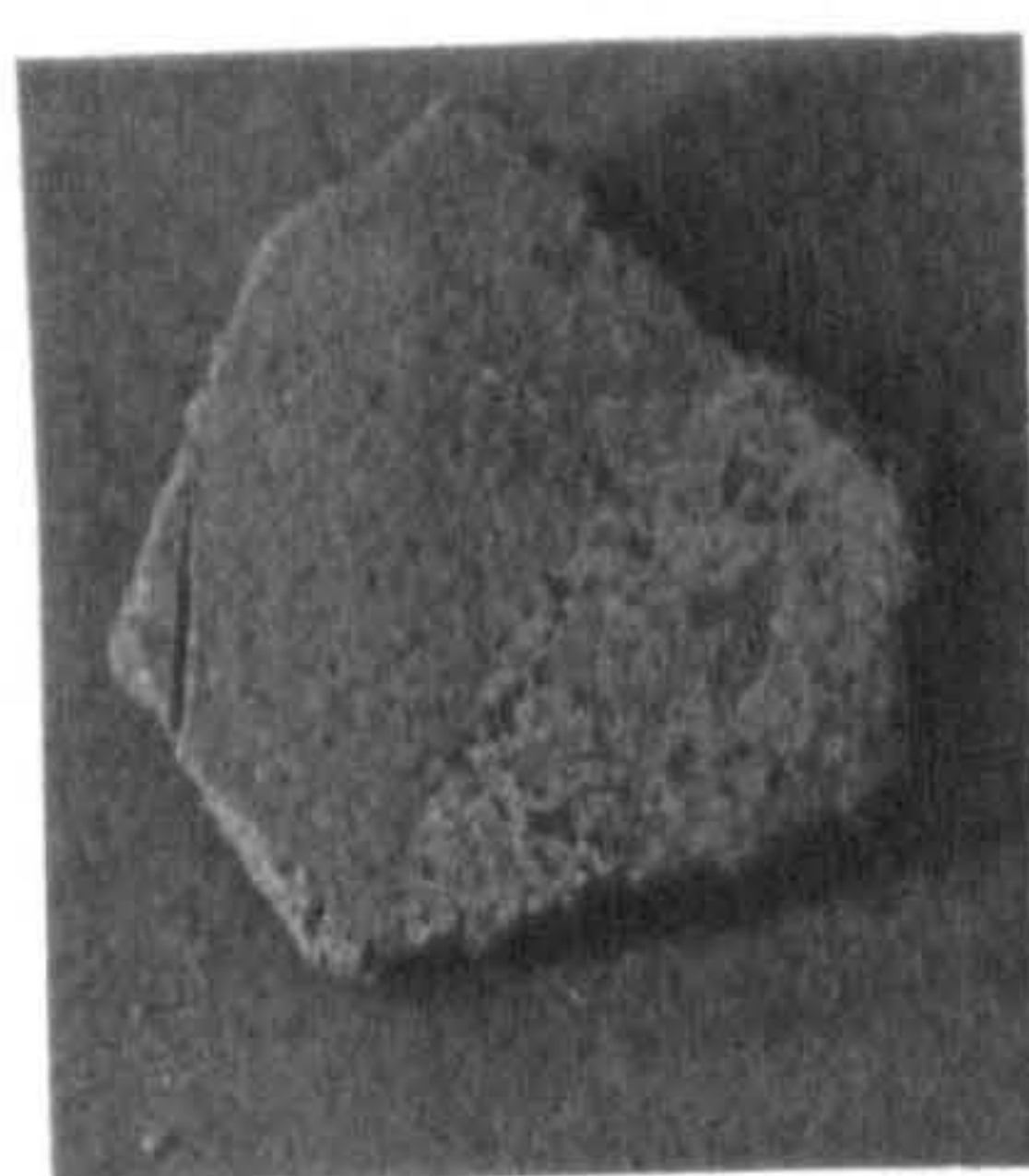
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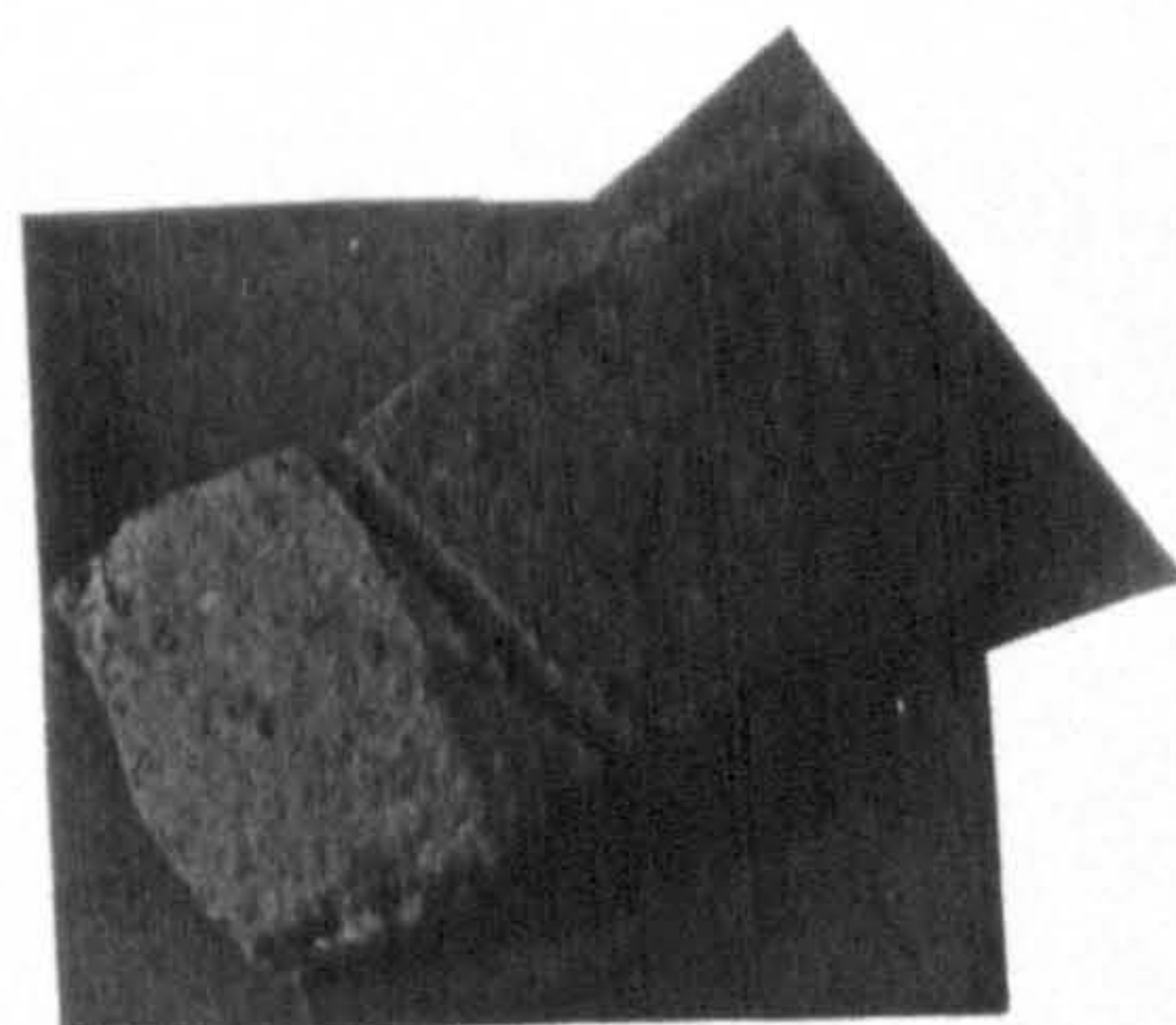
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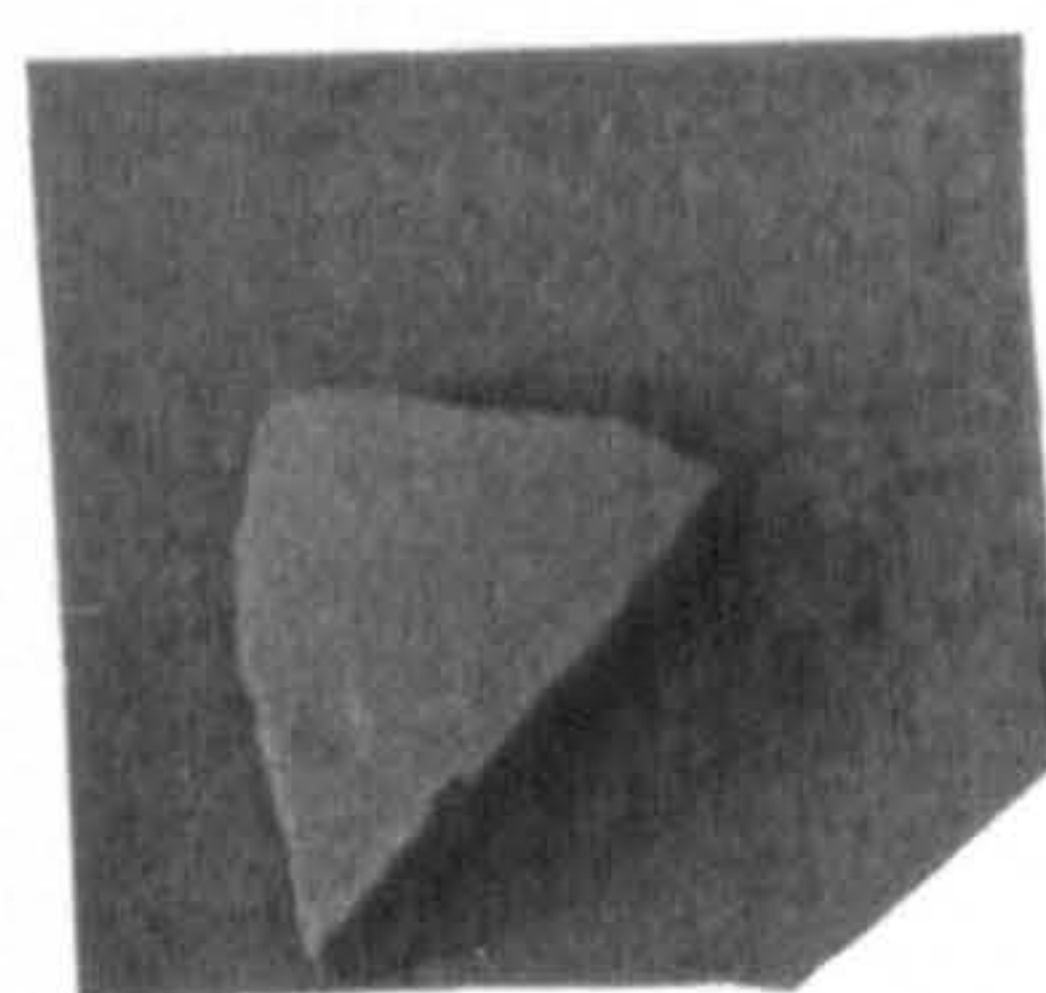
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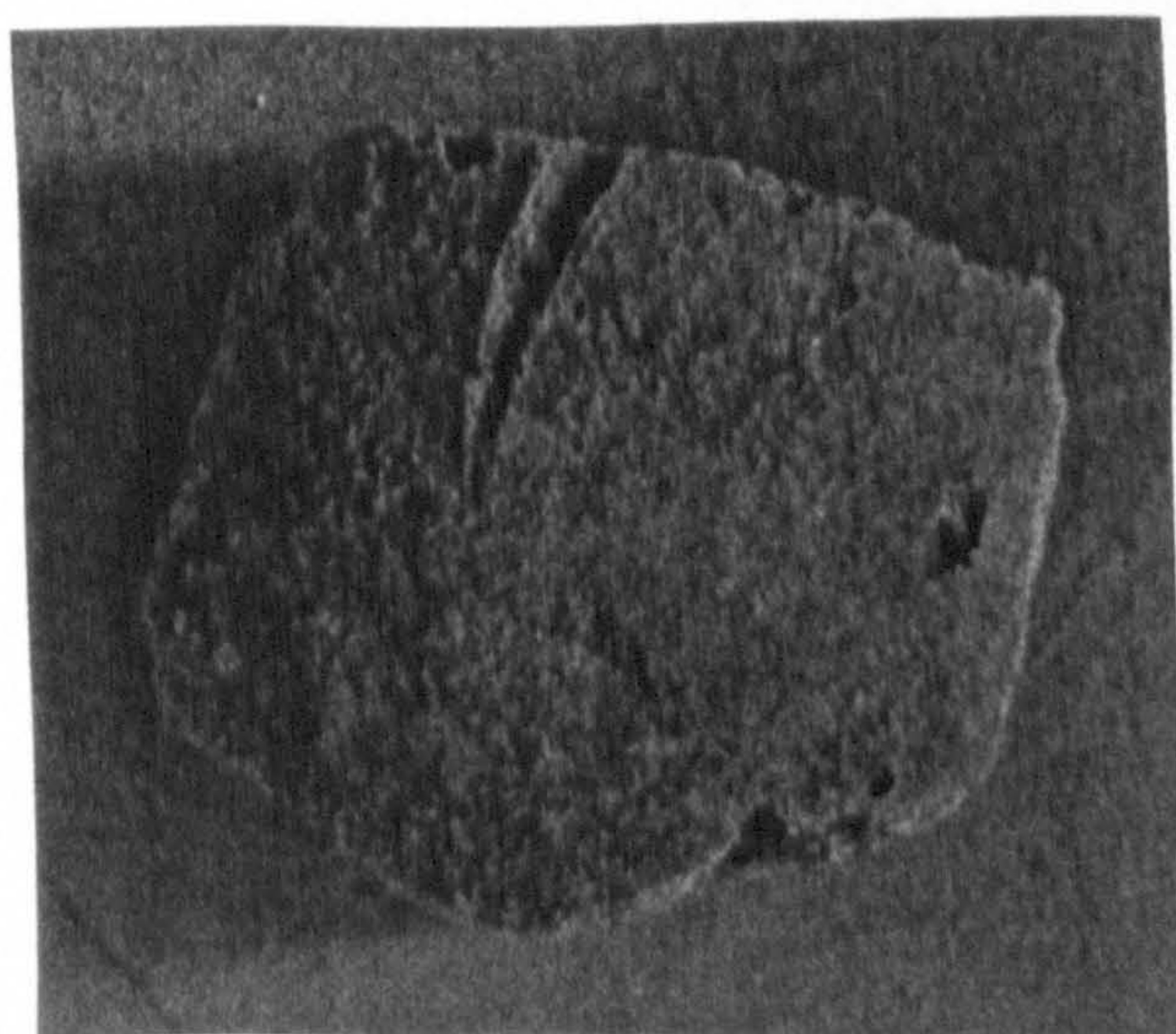
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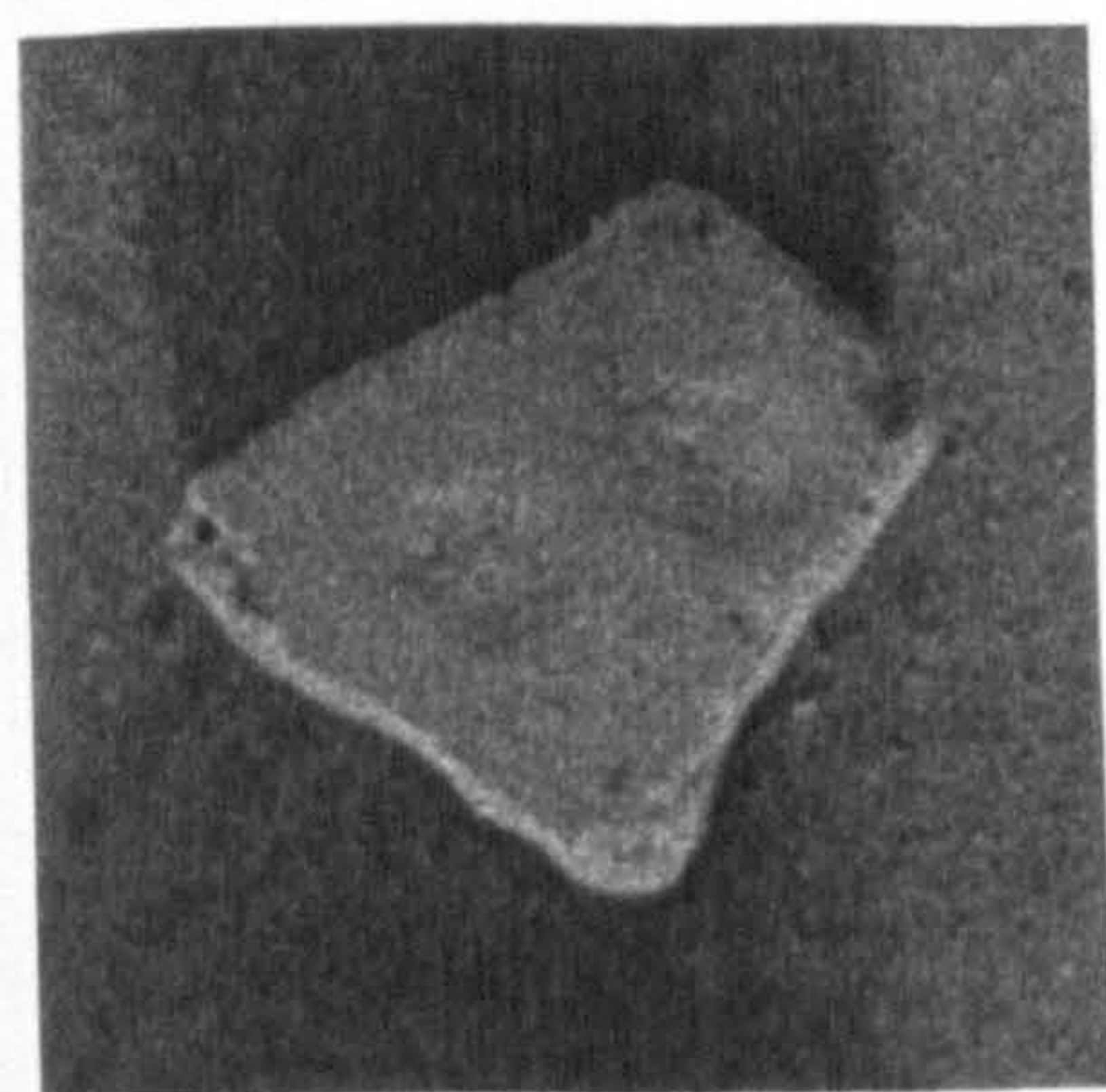
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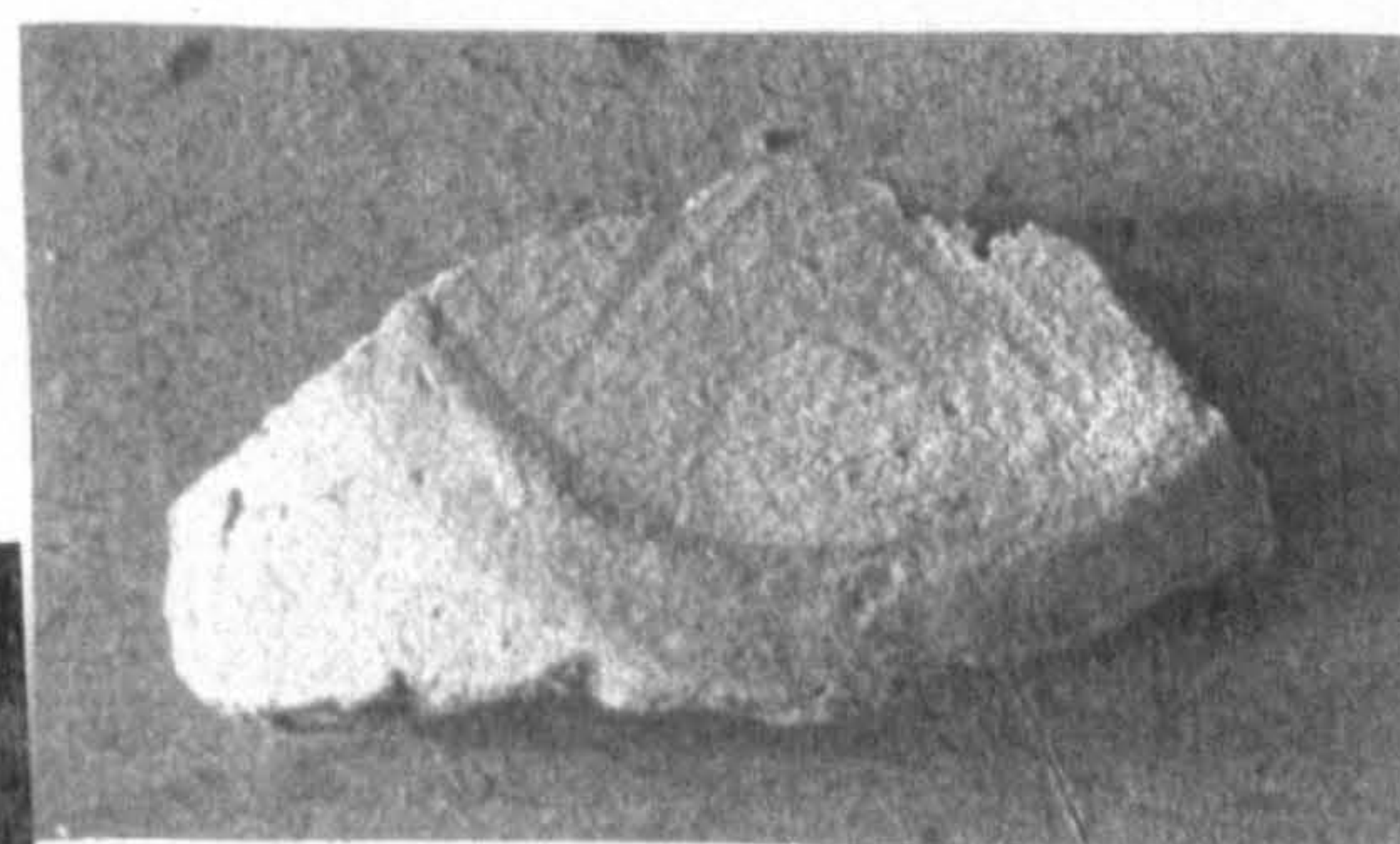
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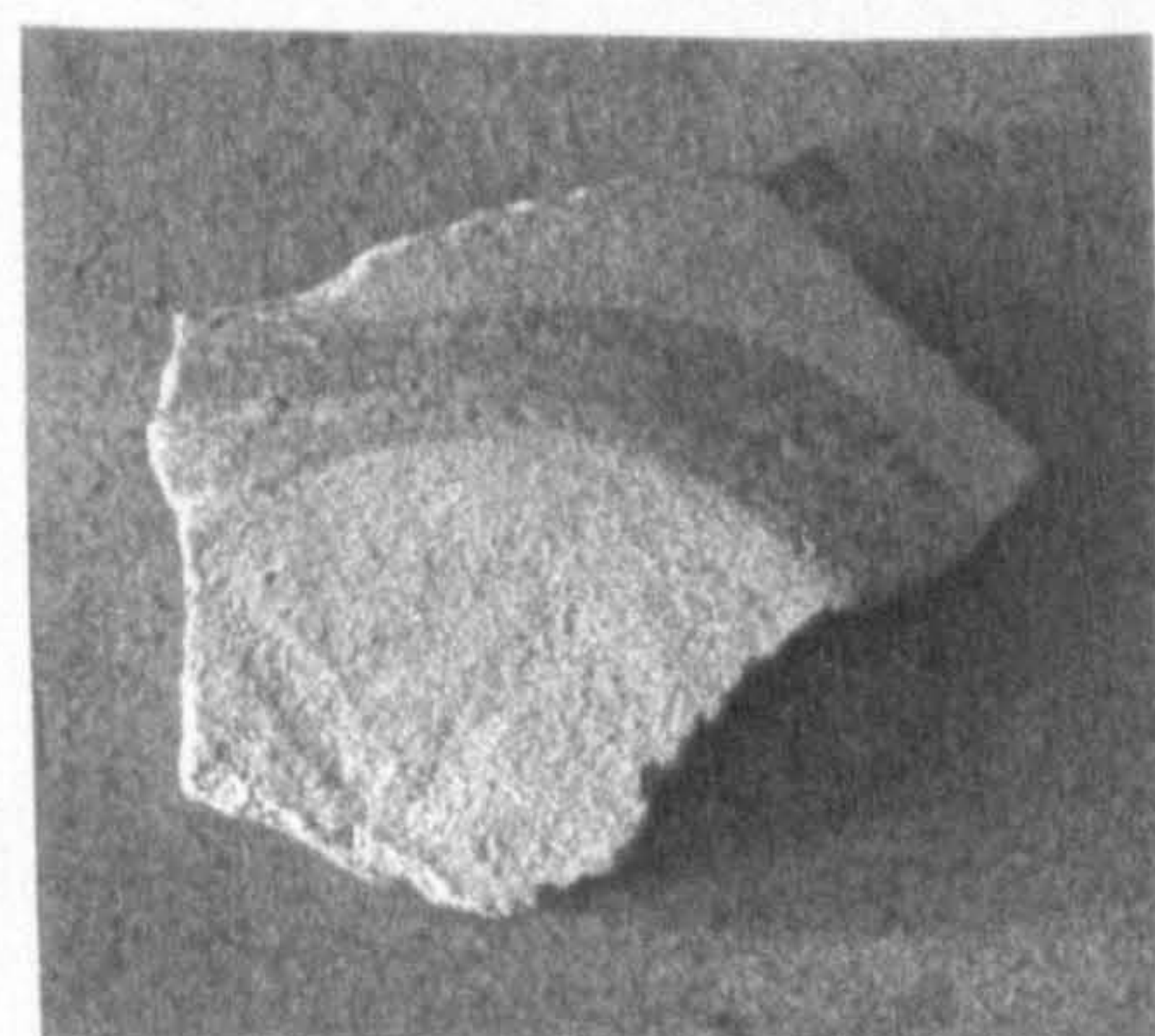
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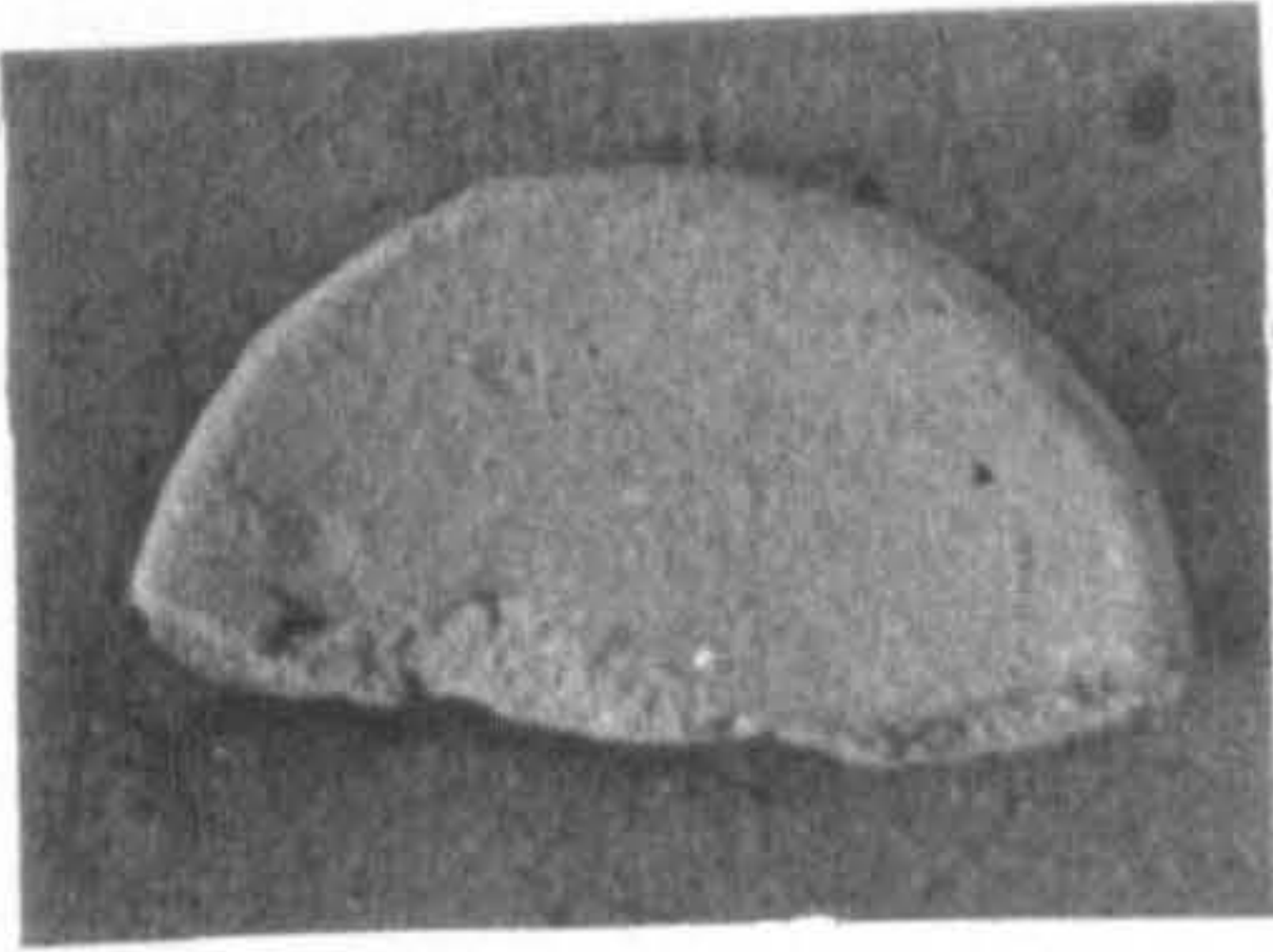


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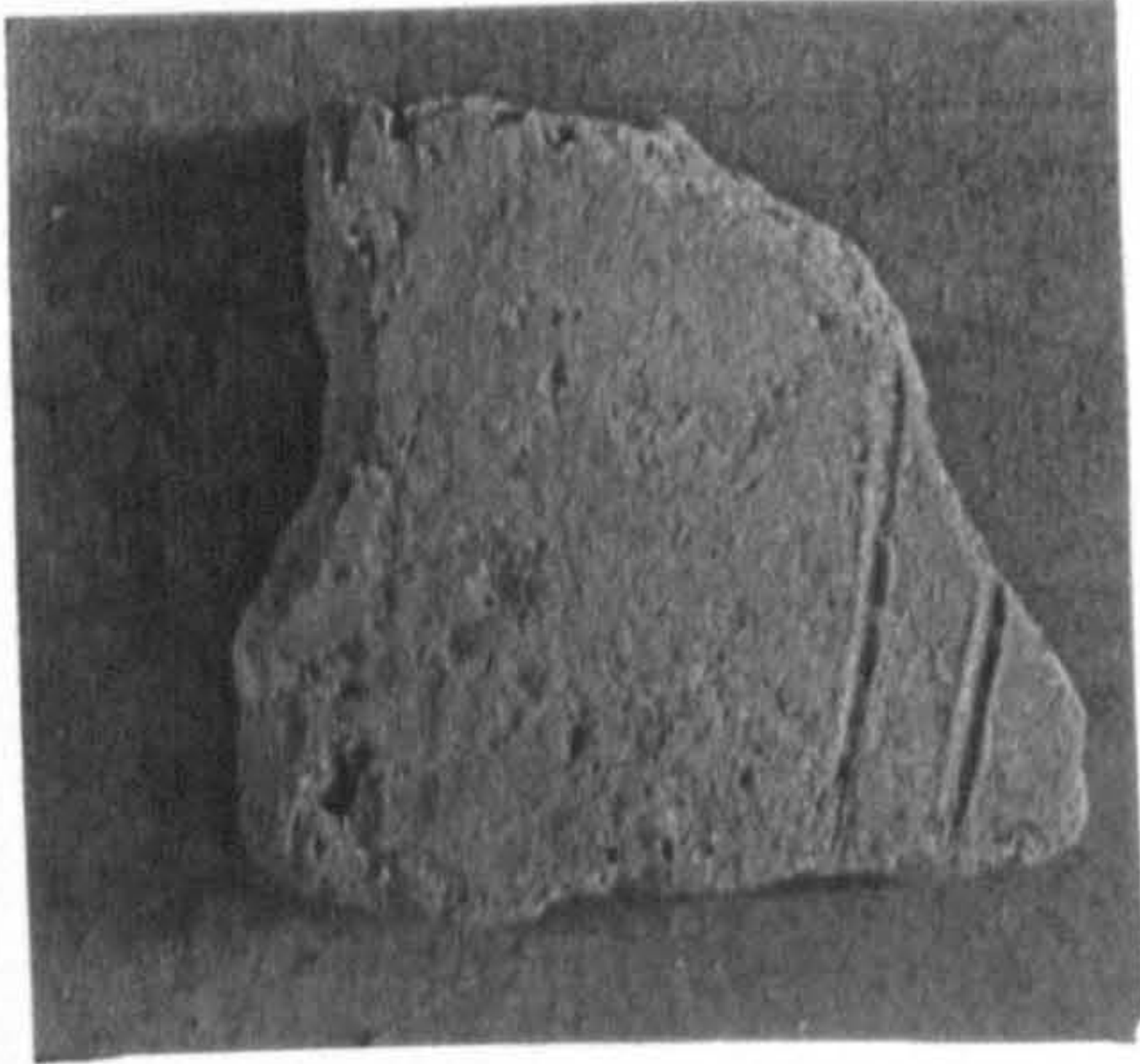


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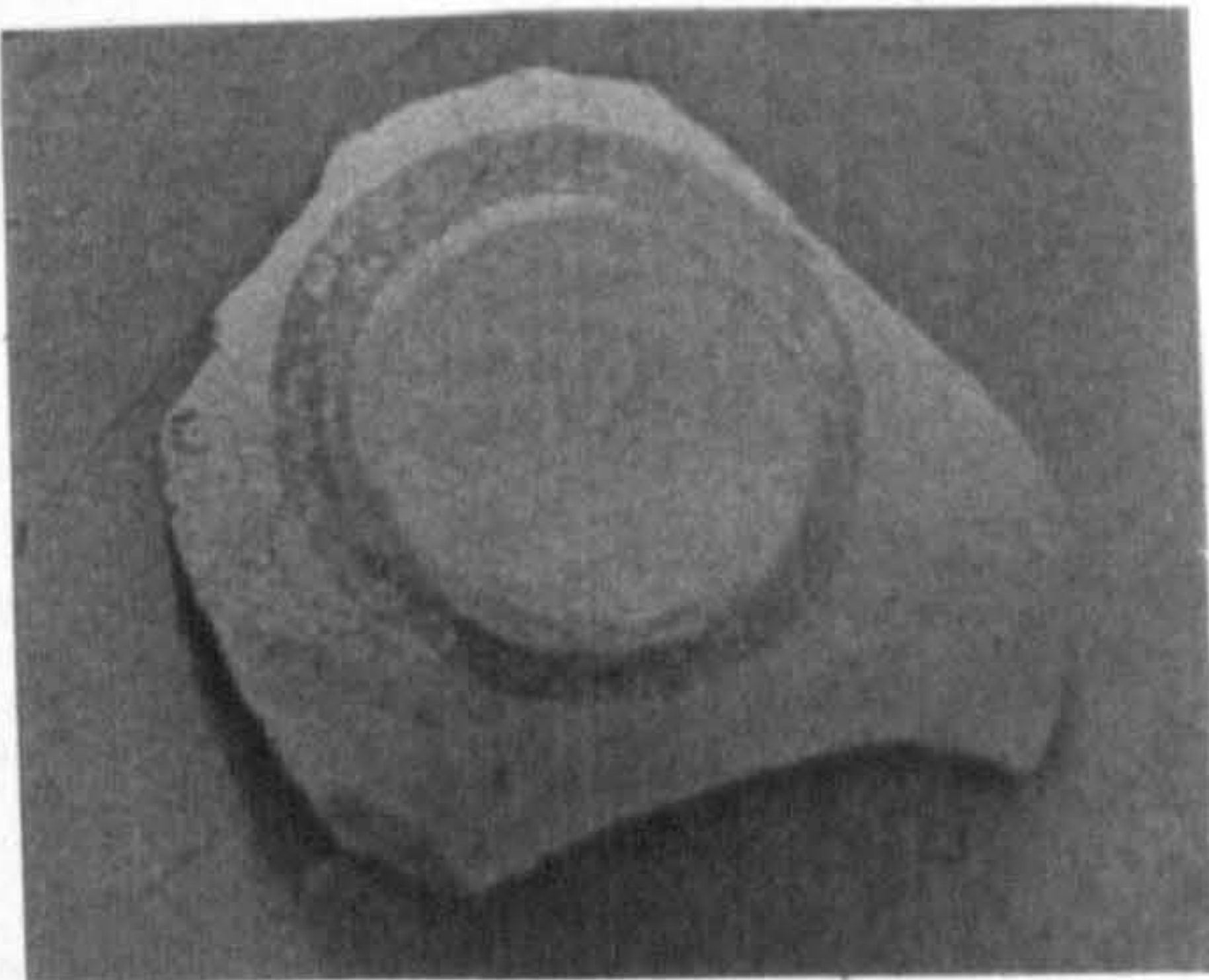
X. Phylakopi 1974-77 46-55. Various scales



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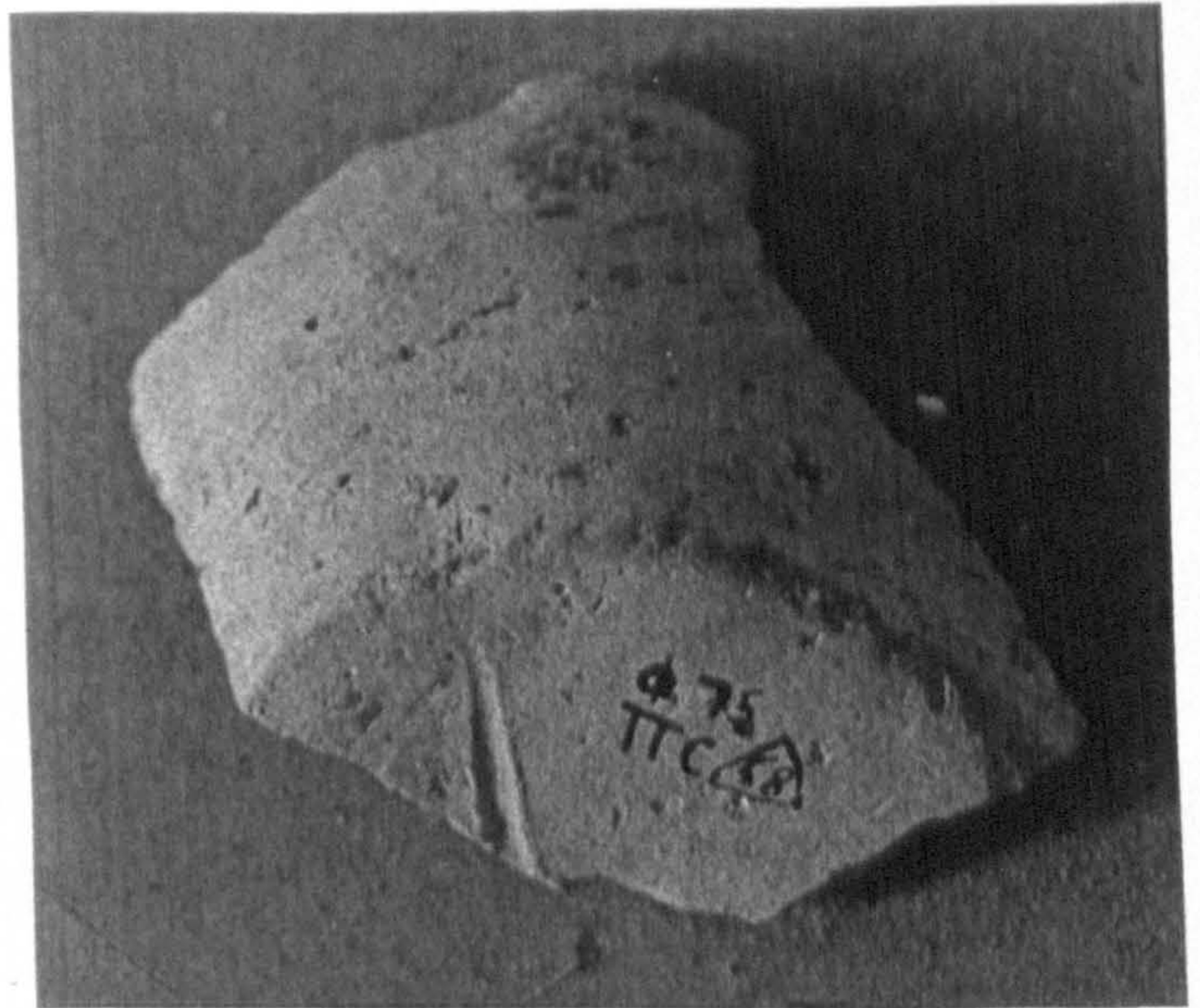
58



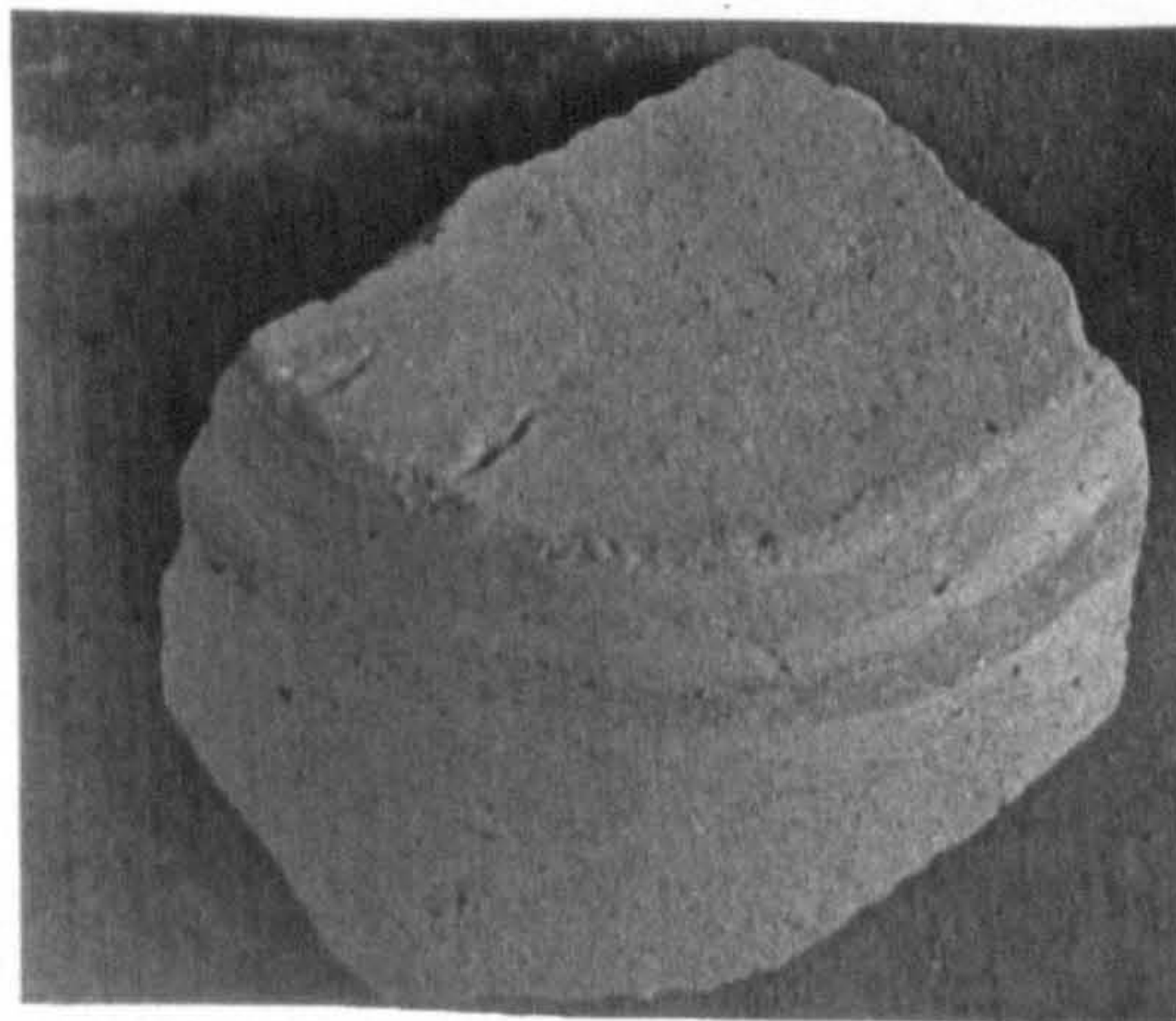
59



62



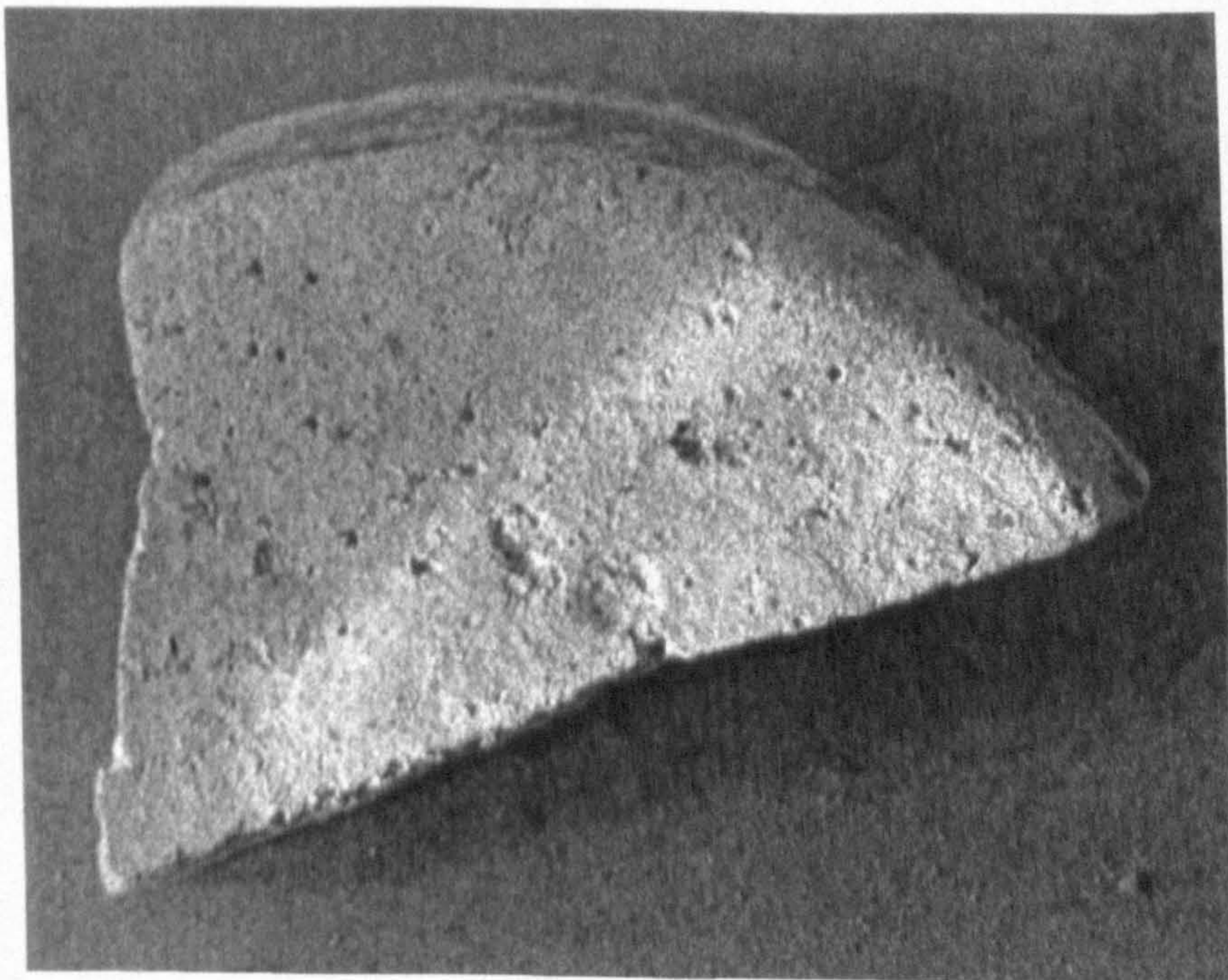
57



60

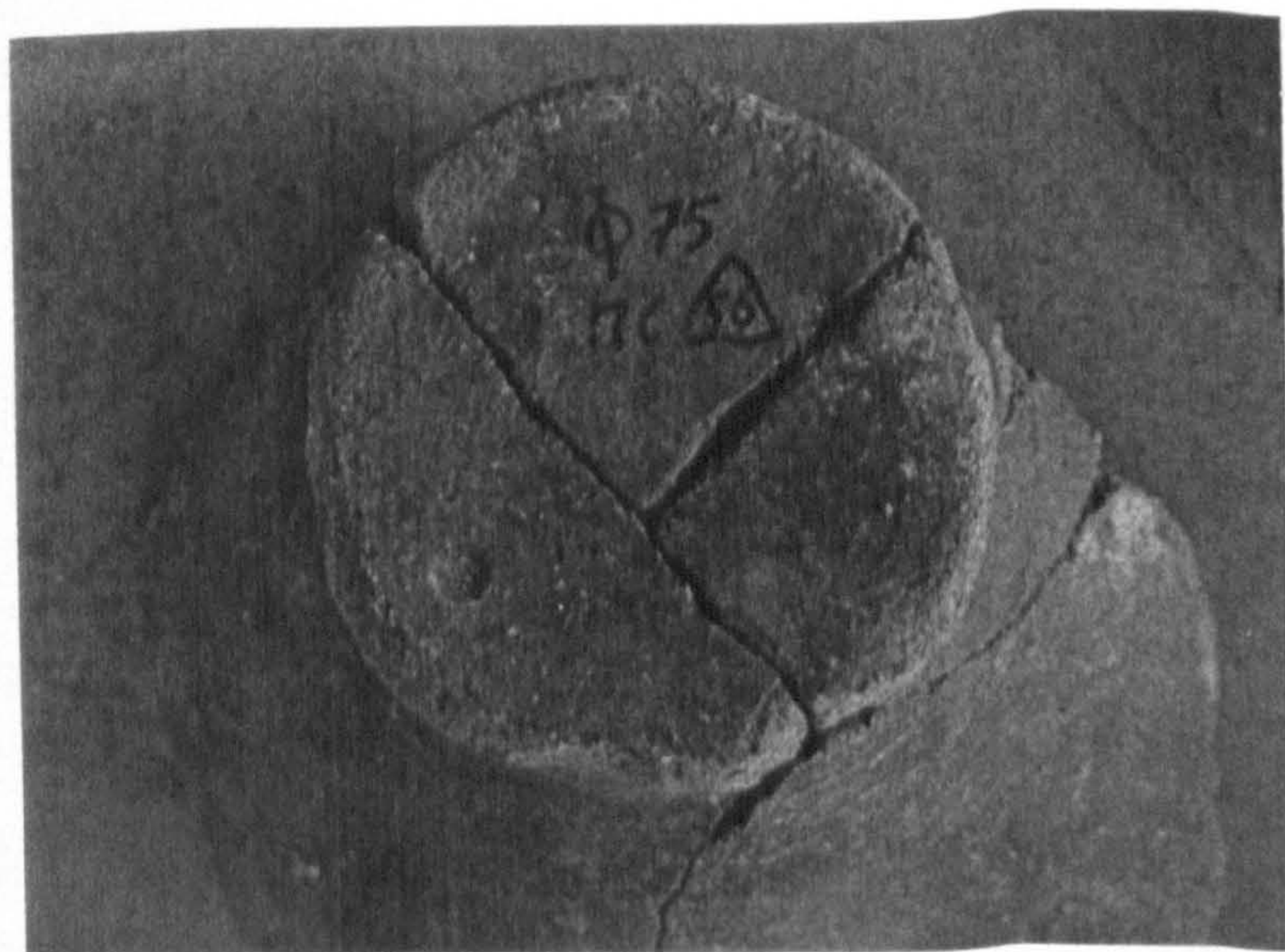


61

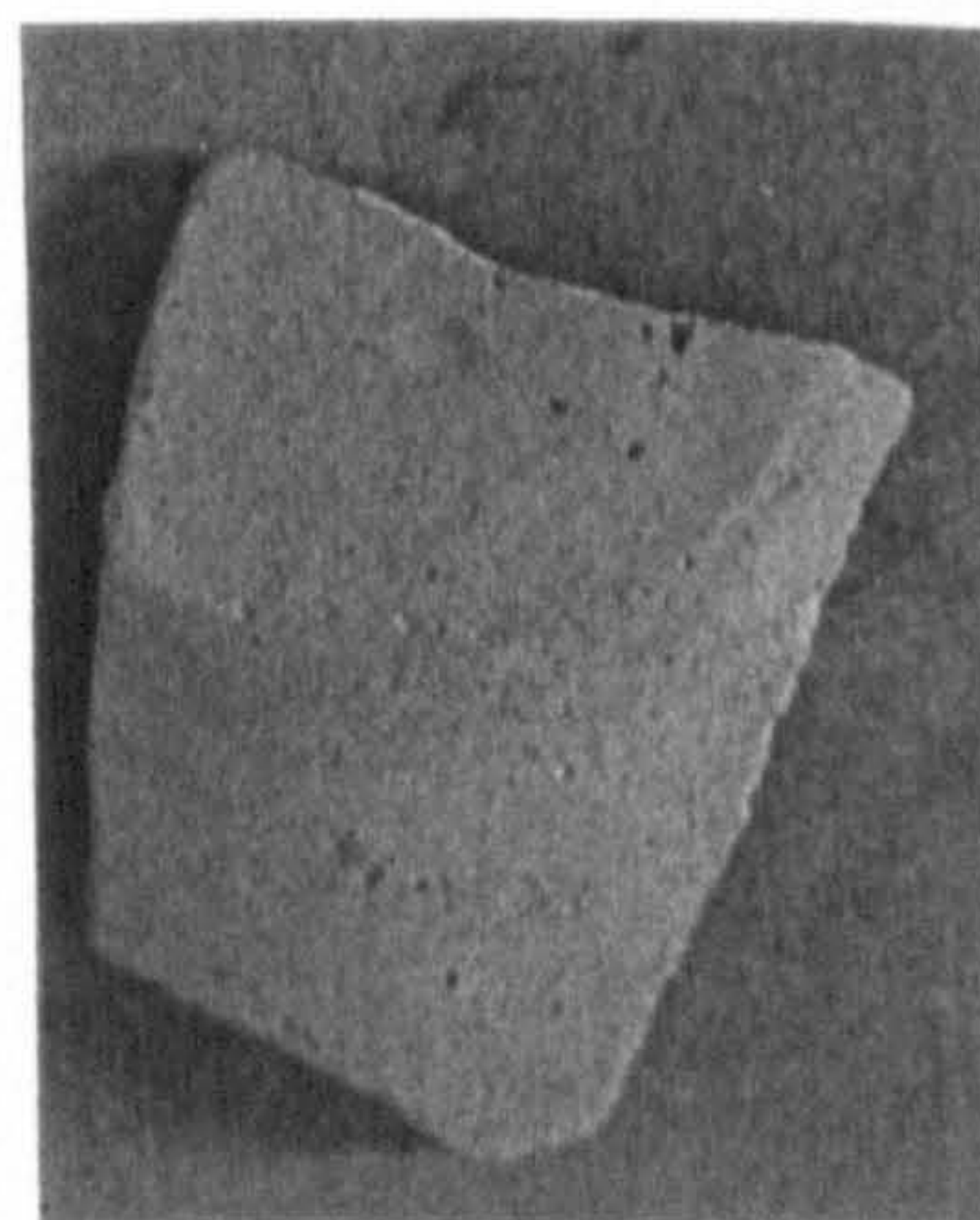


63

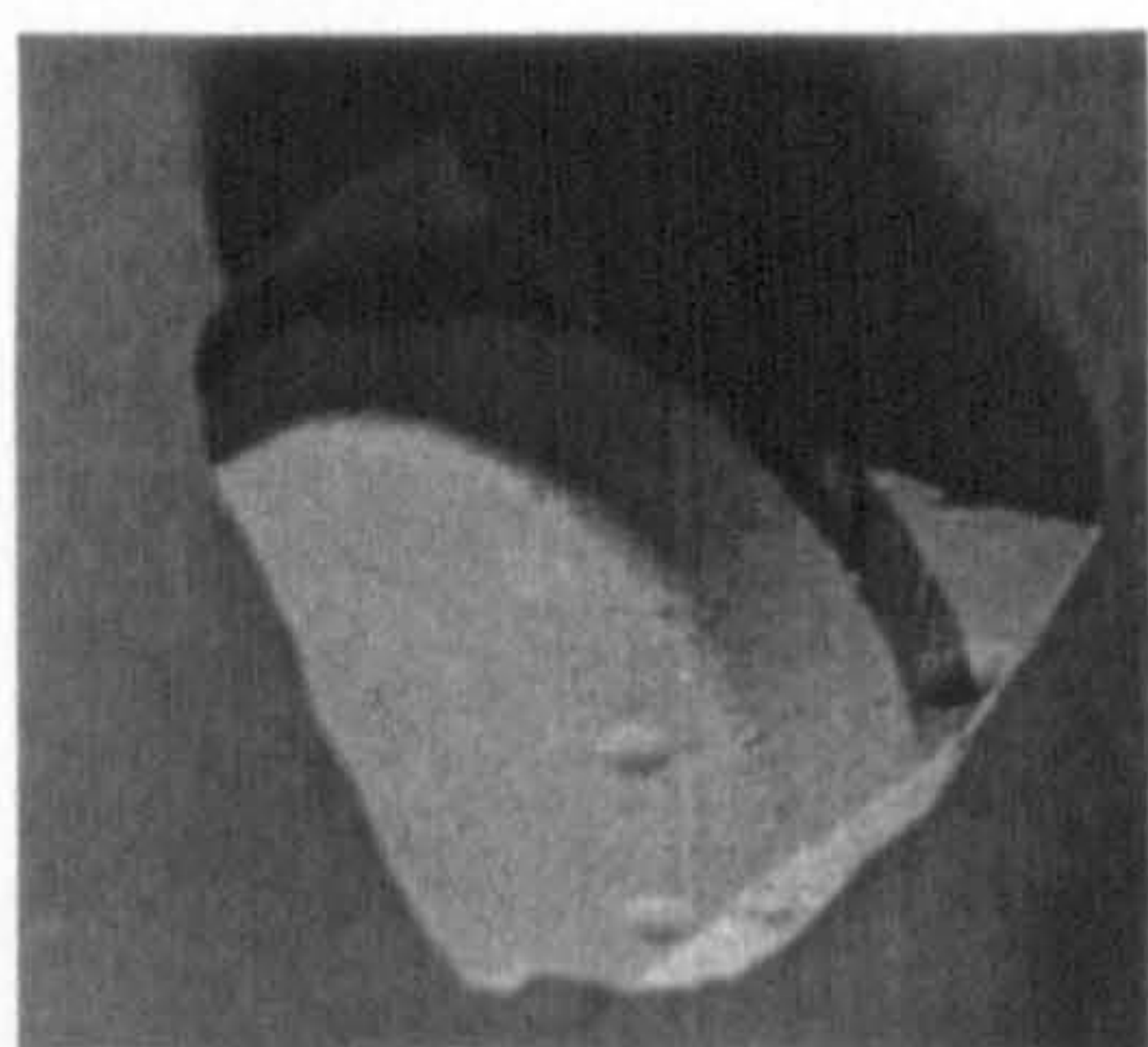
XI. Phylakopi 1974-77 56-63. Various scales



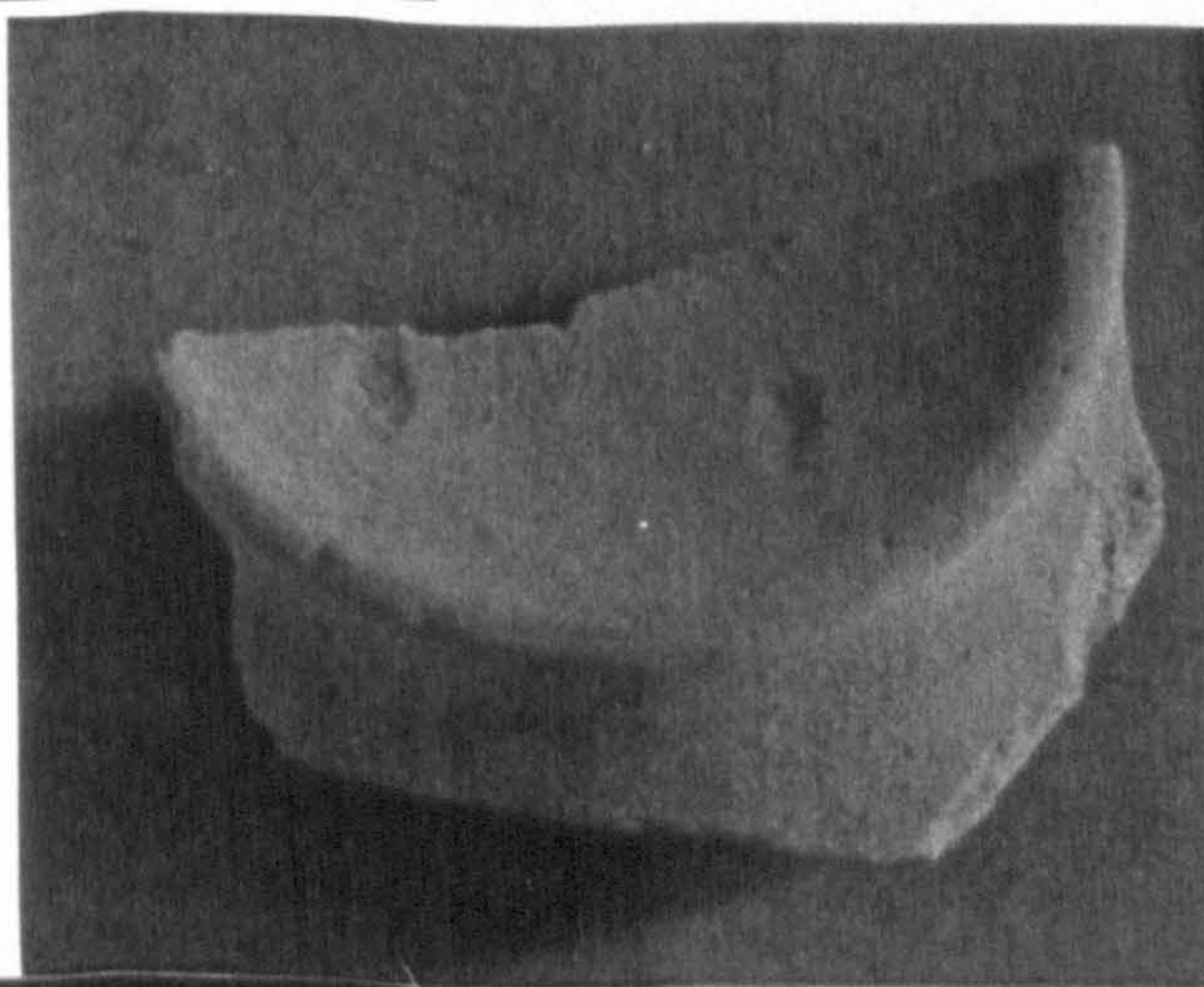
64



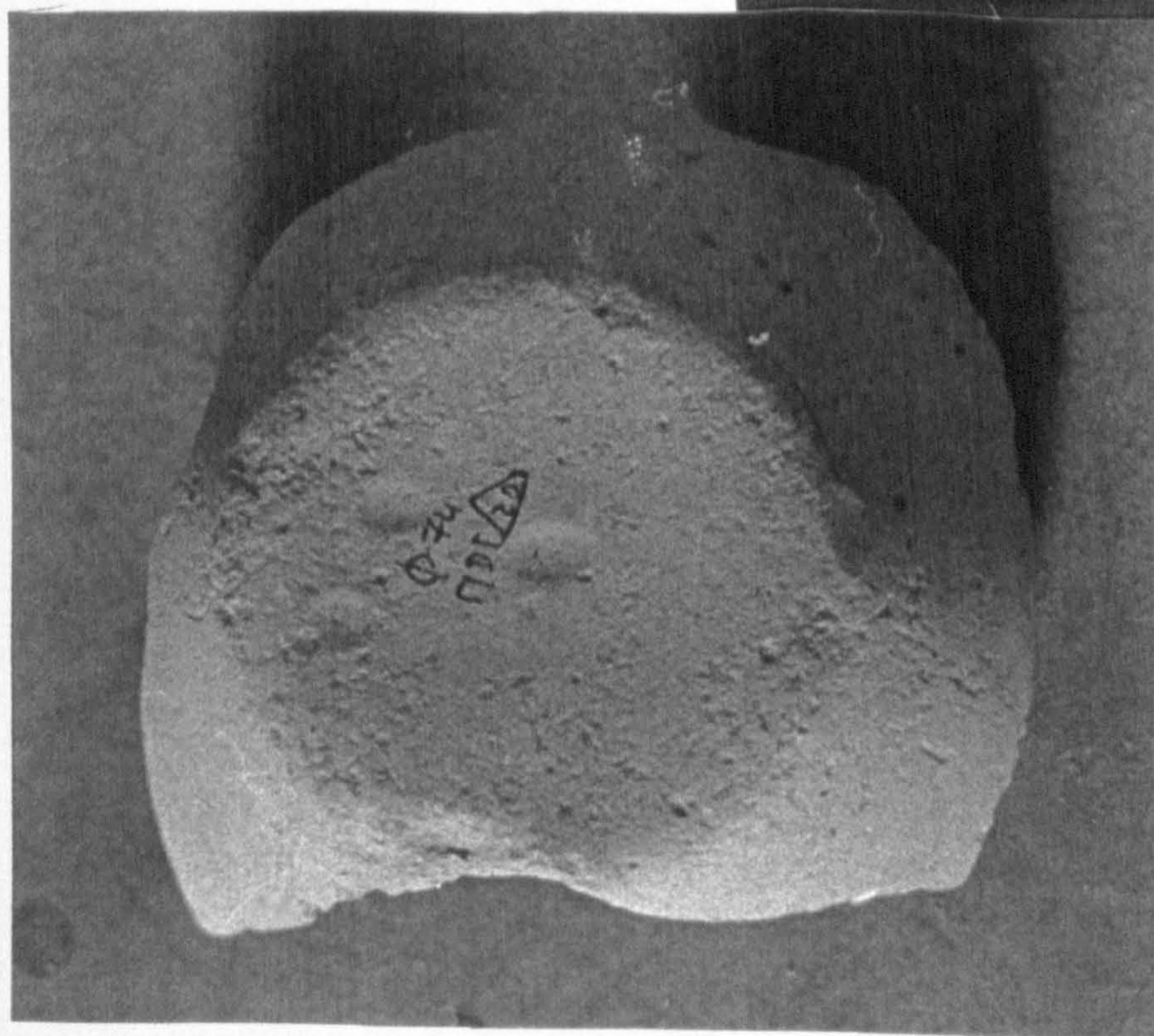
65



67

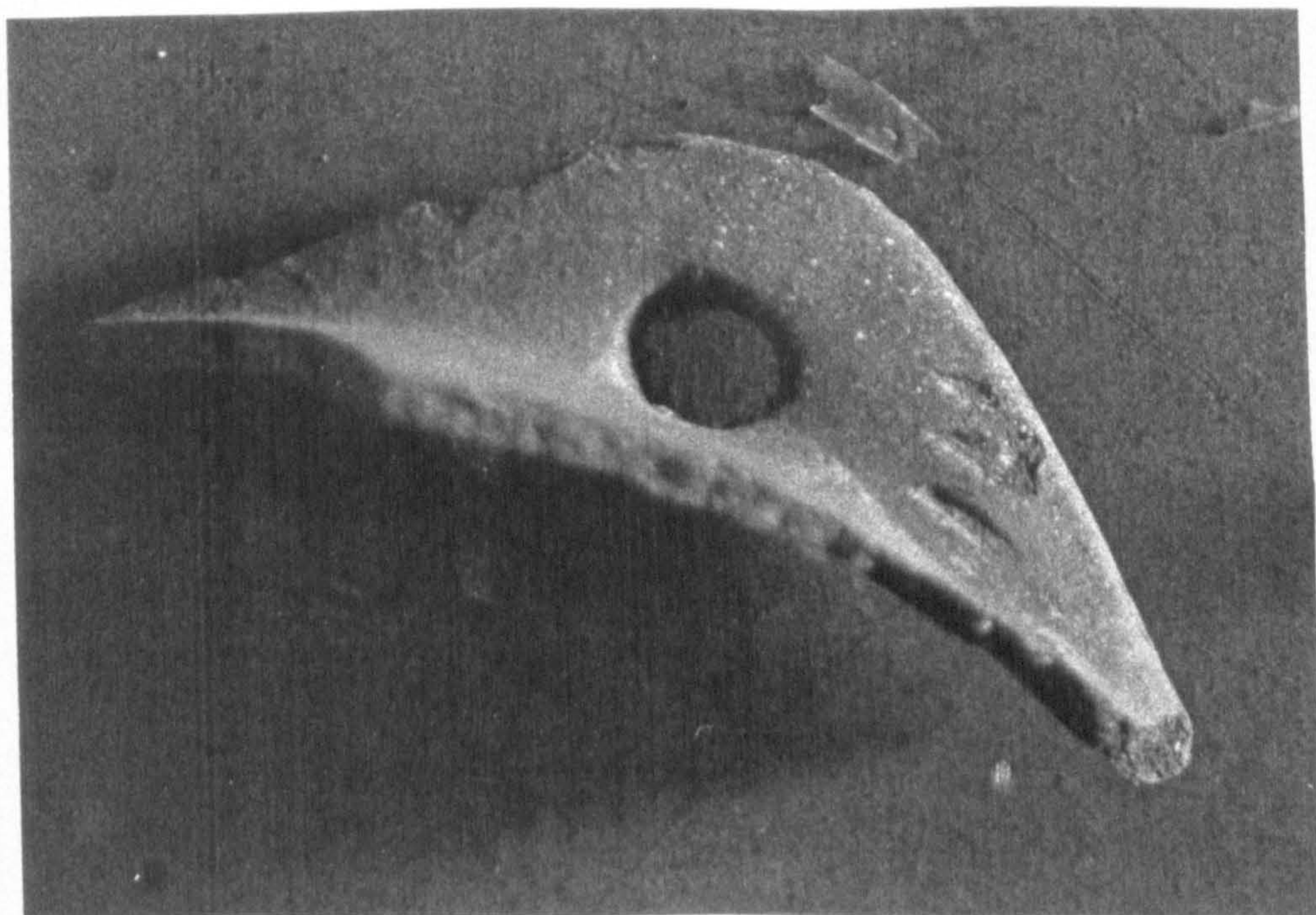


68

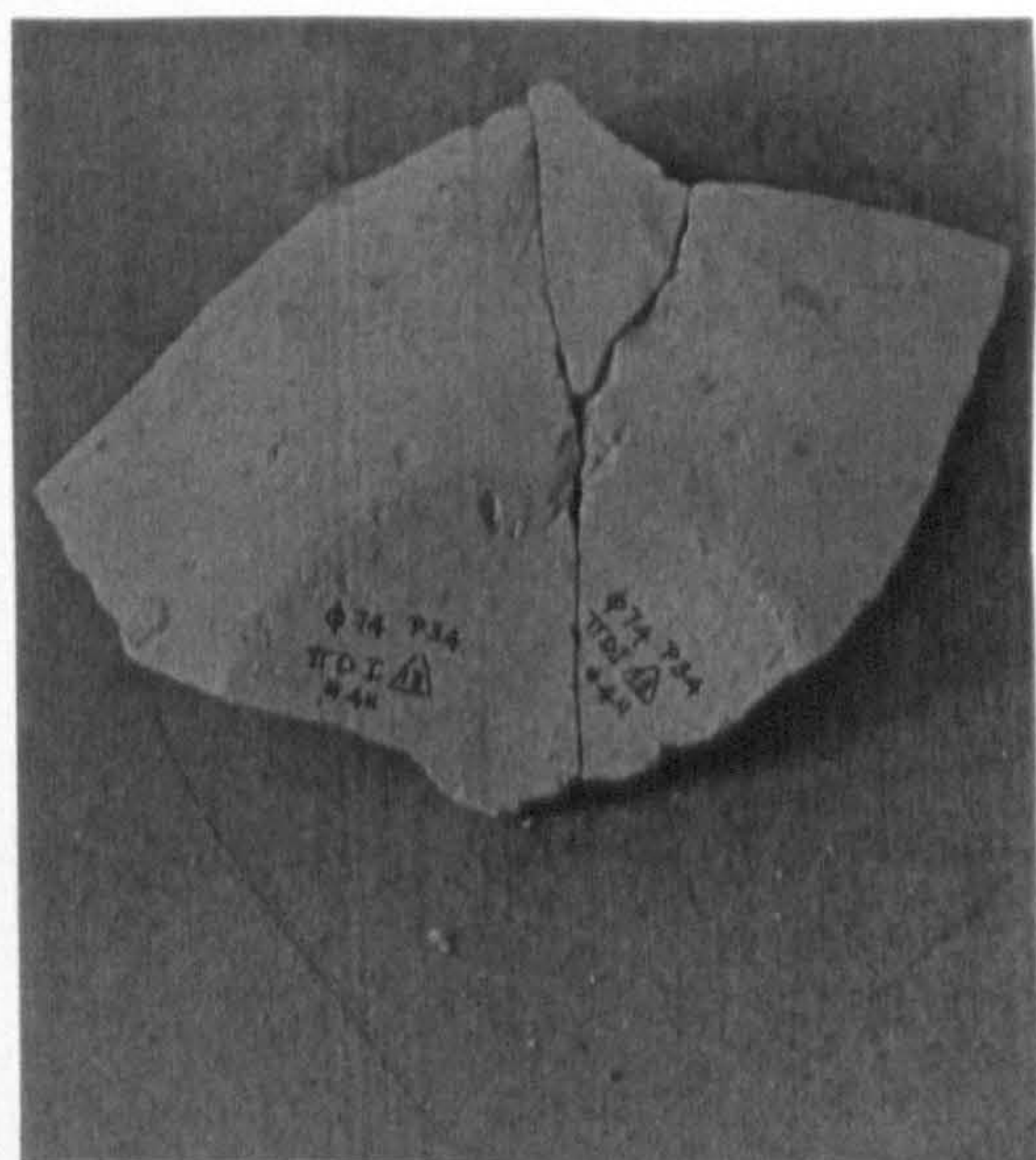


69

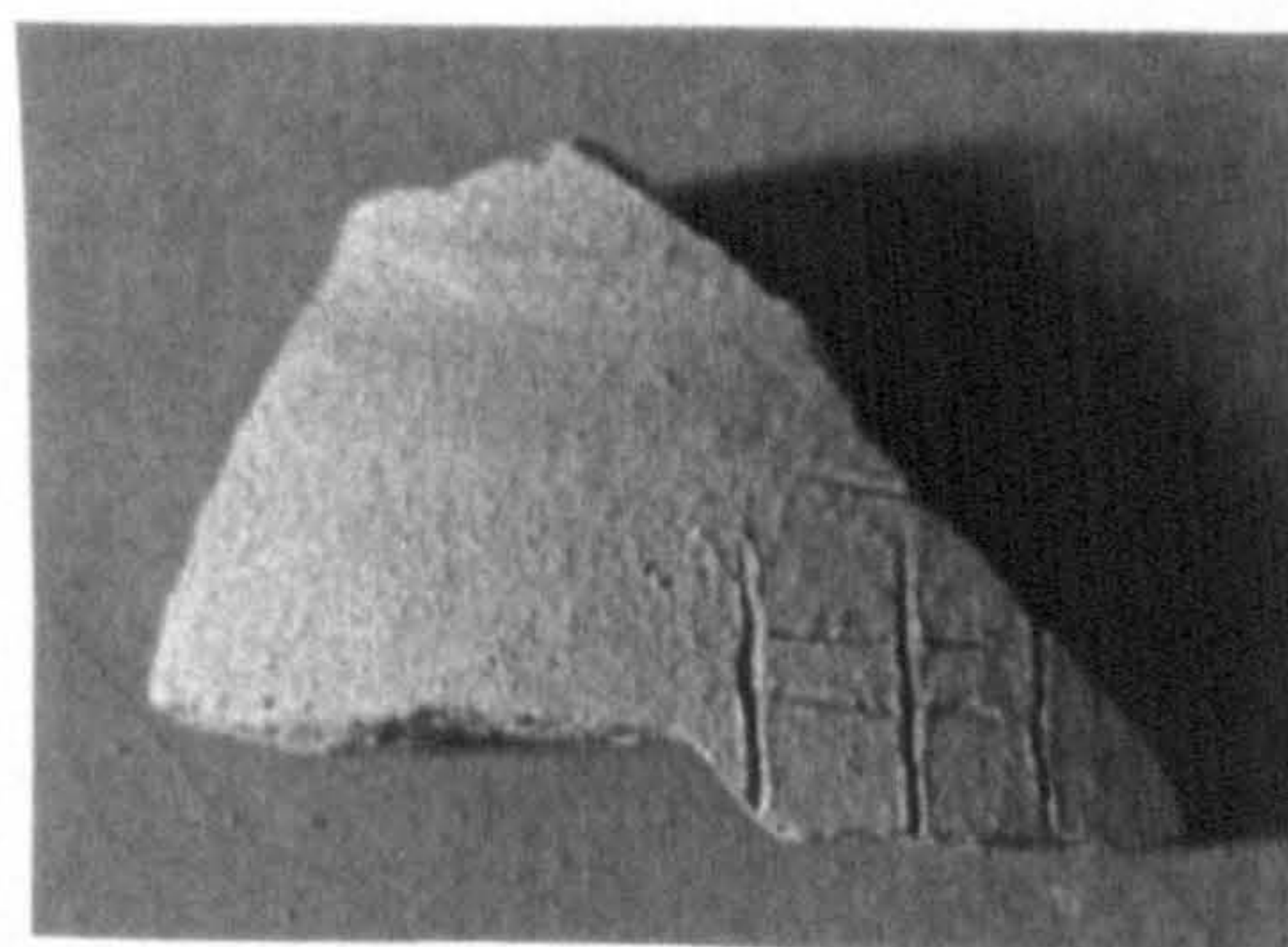
XII. Phylakopi 1974-77 64,65,67-69. Various scales



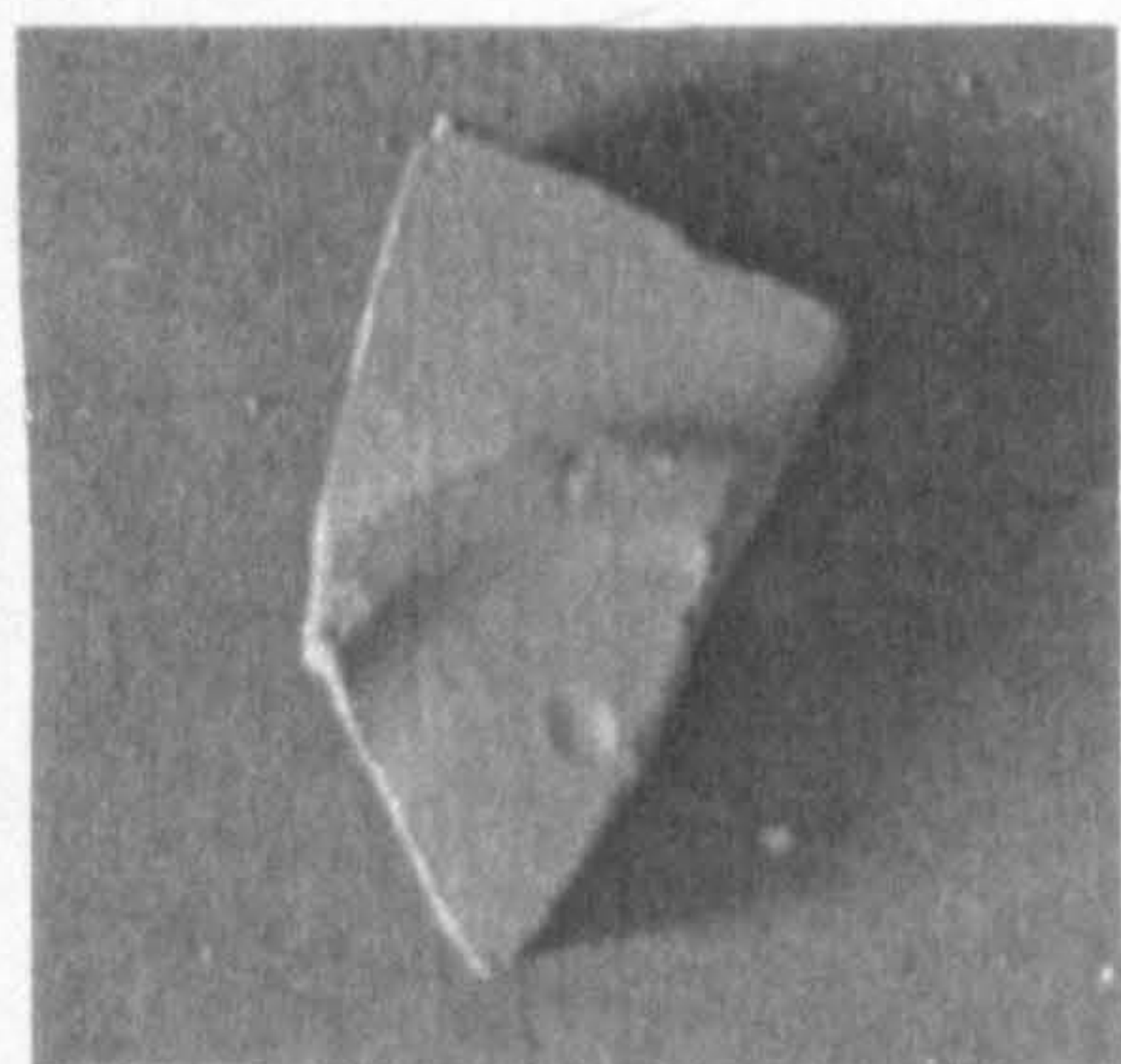
70



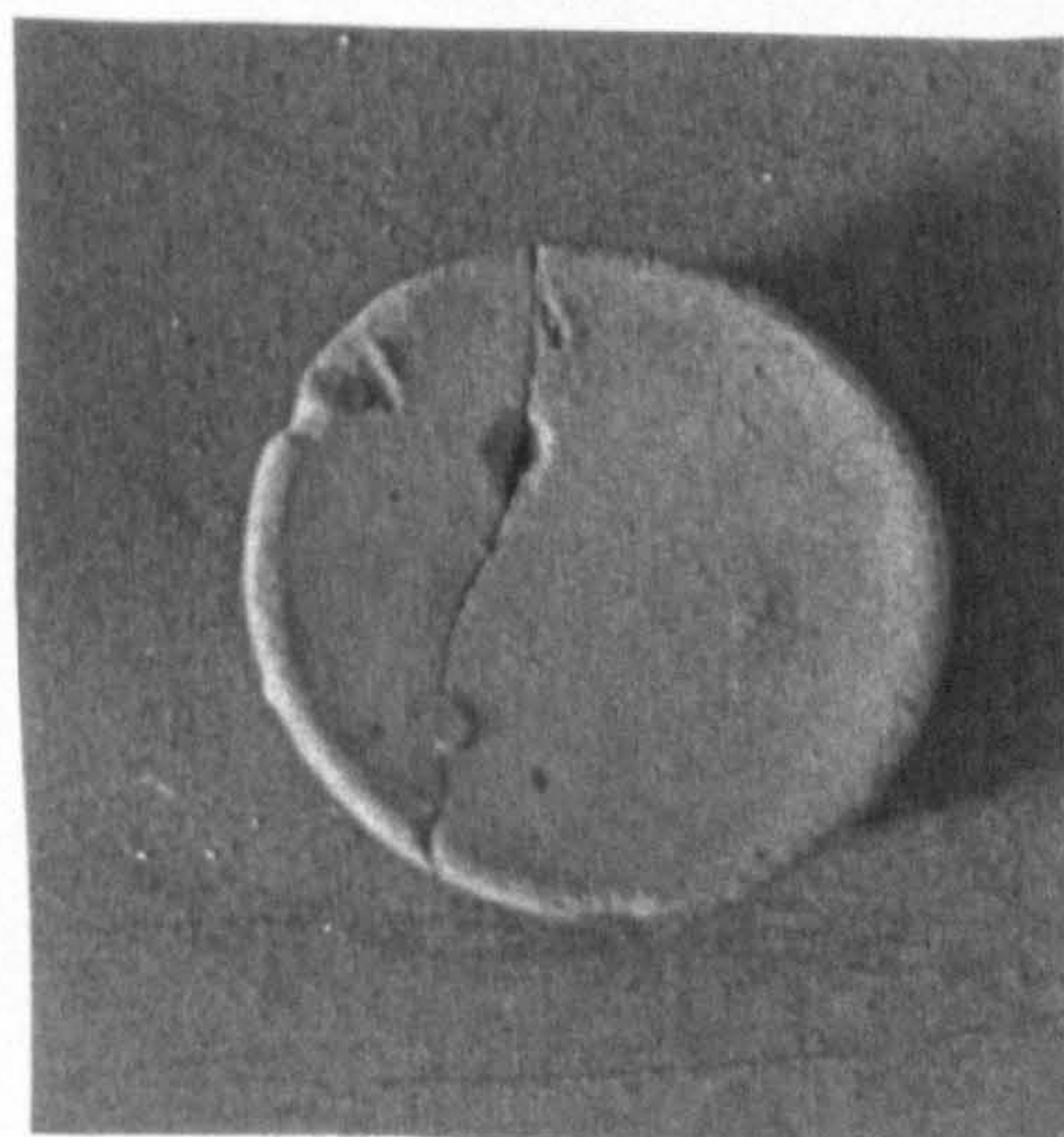
71



72

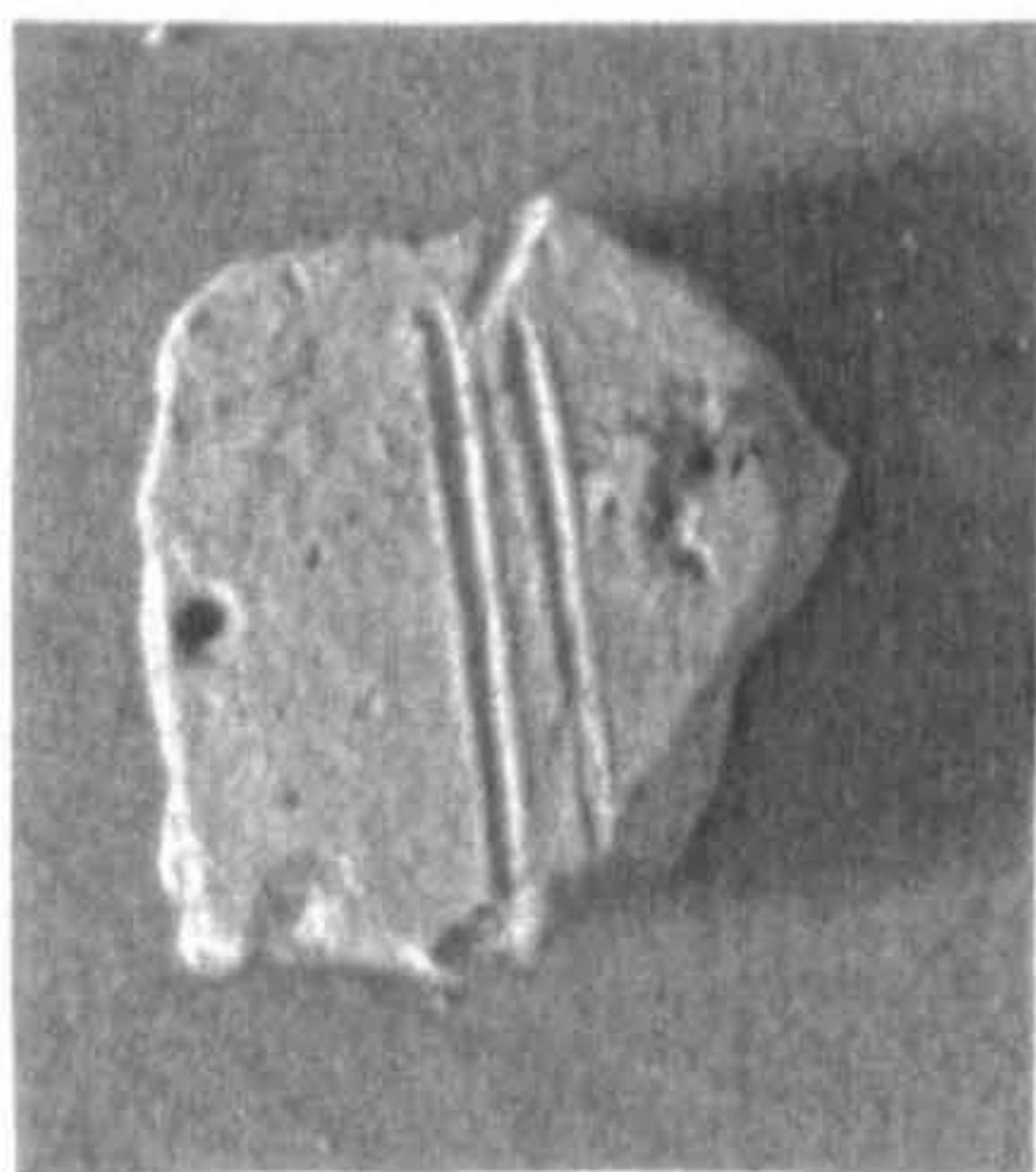


73

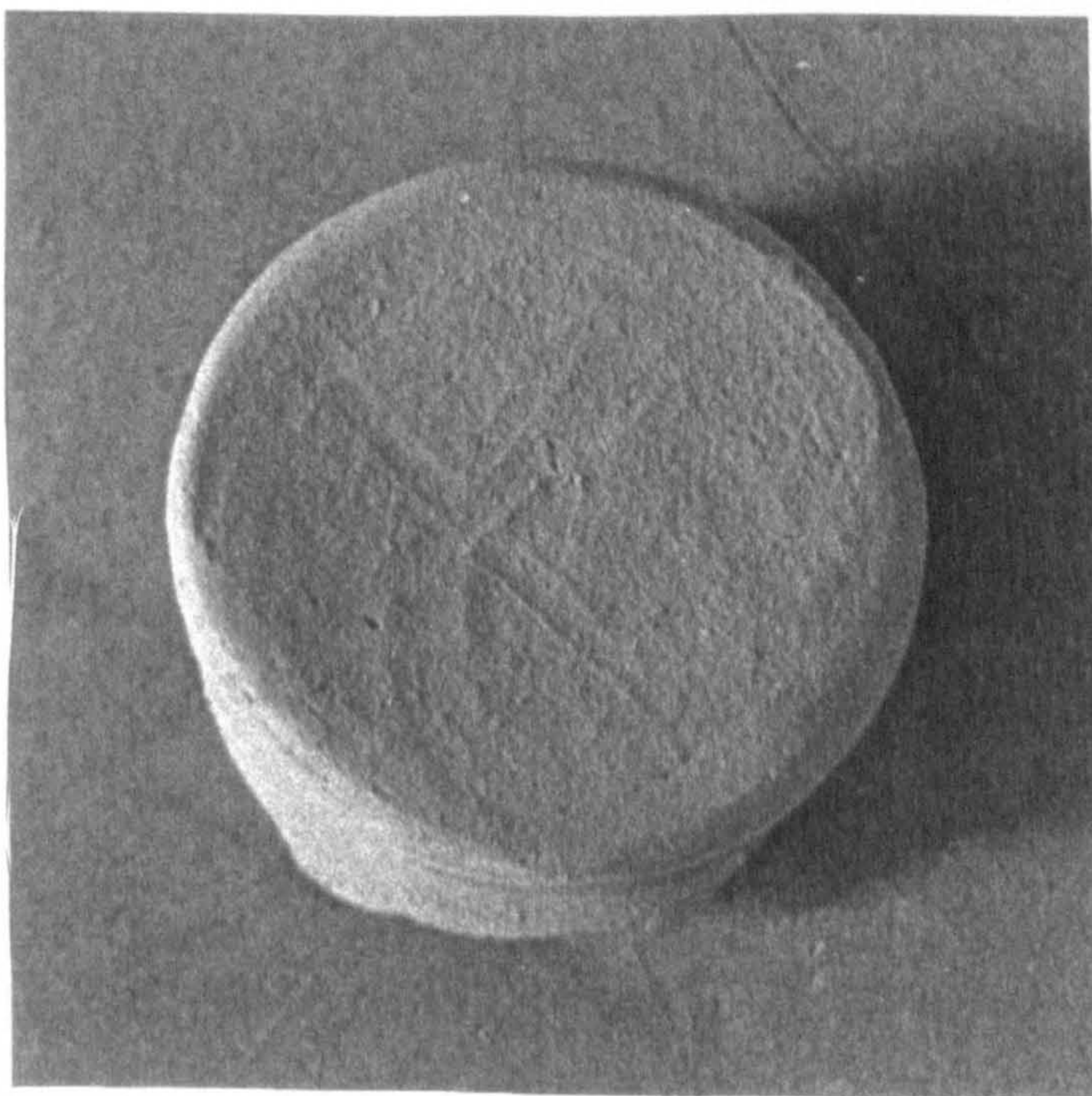


74

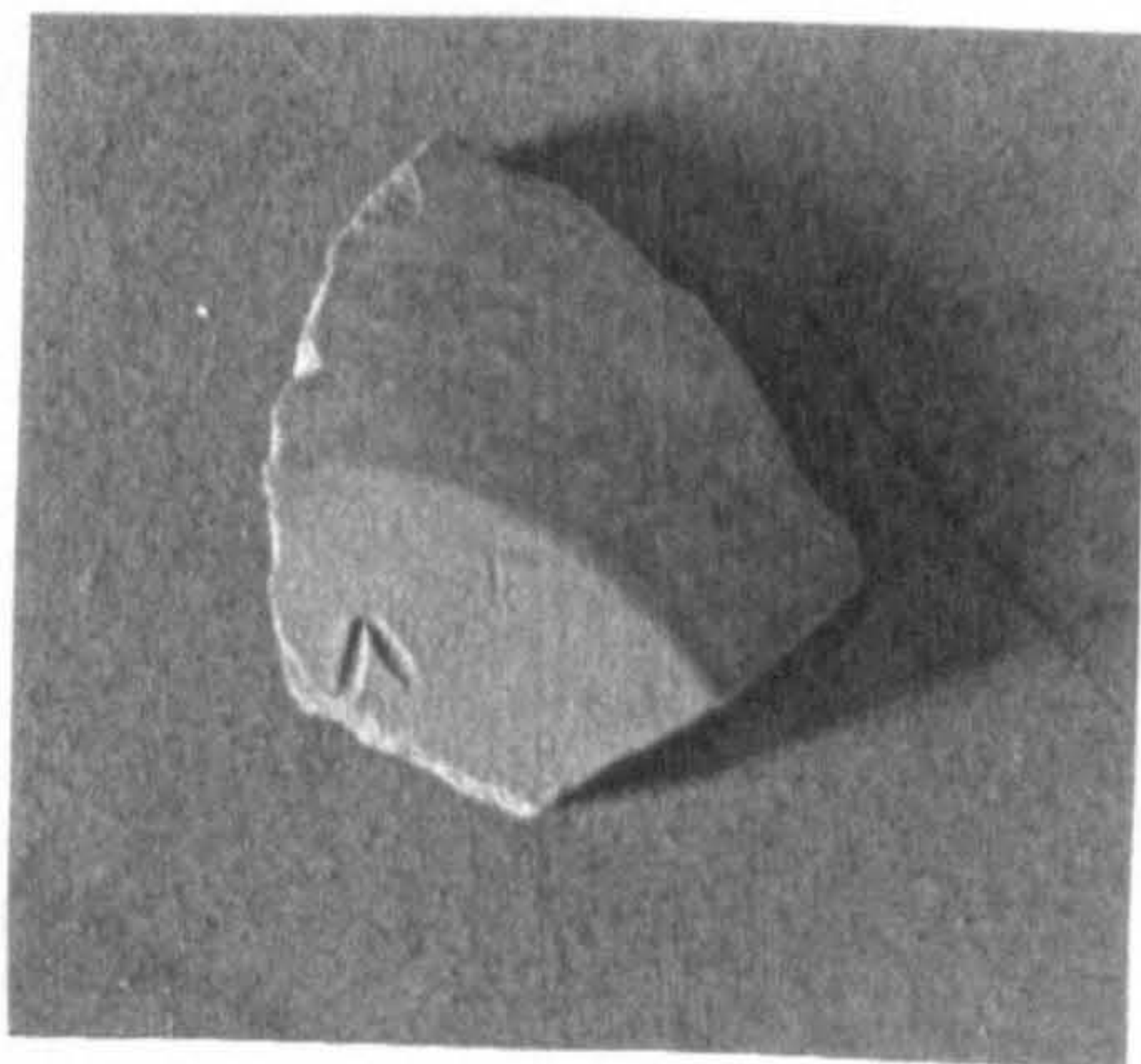
XIII. Phylakopi 1974-77 70-74. Various scales



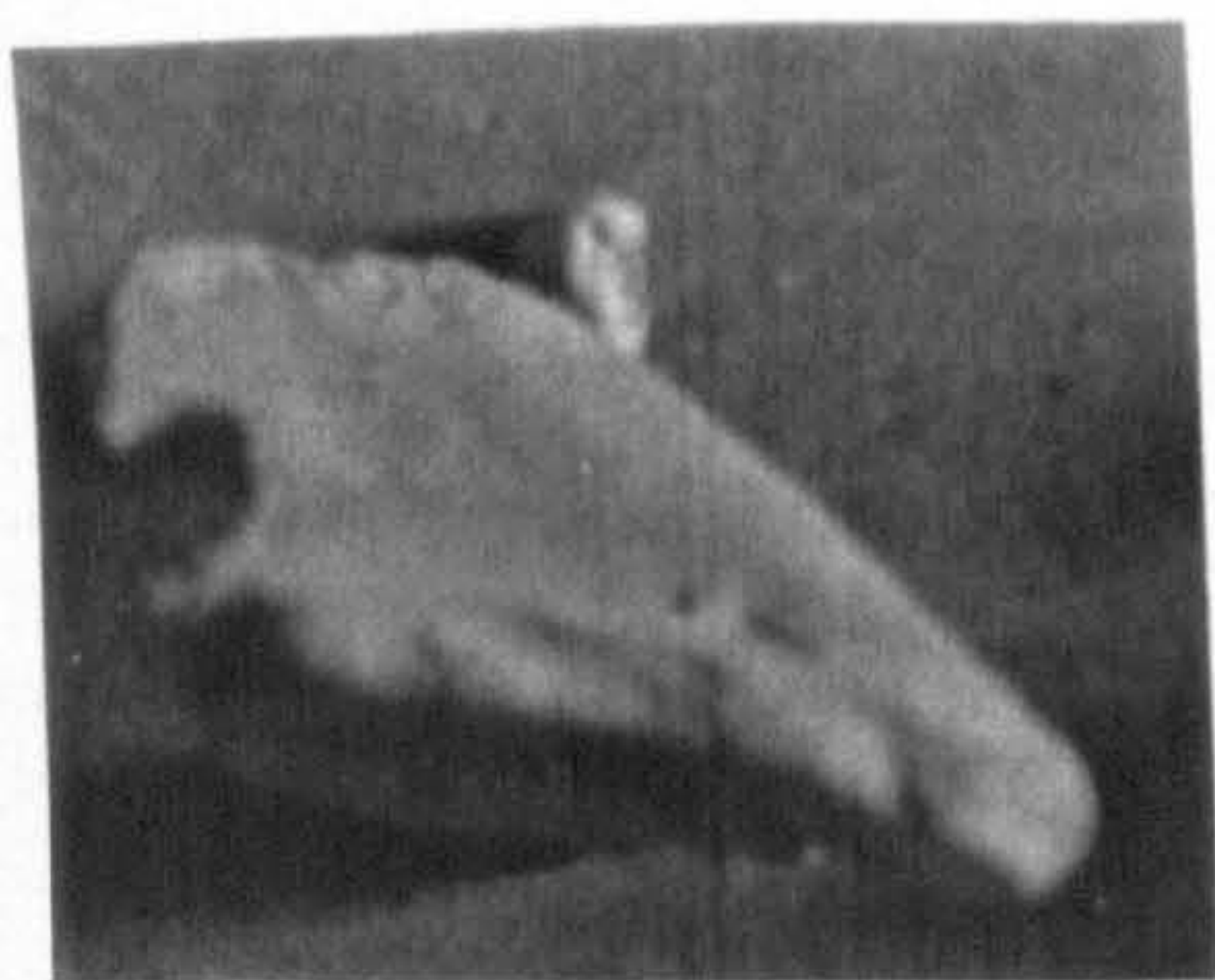
75



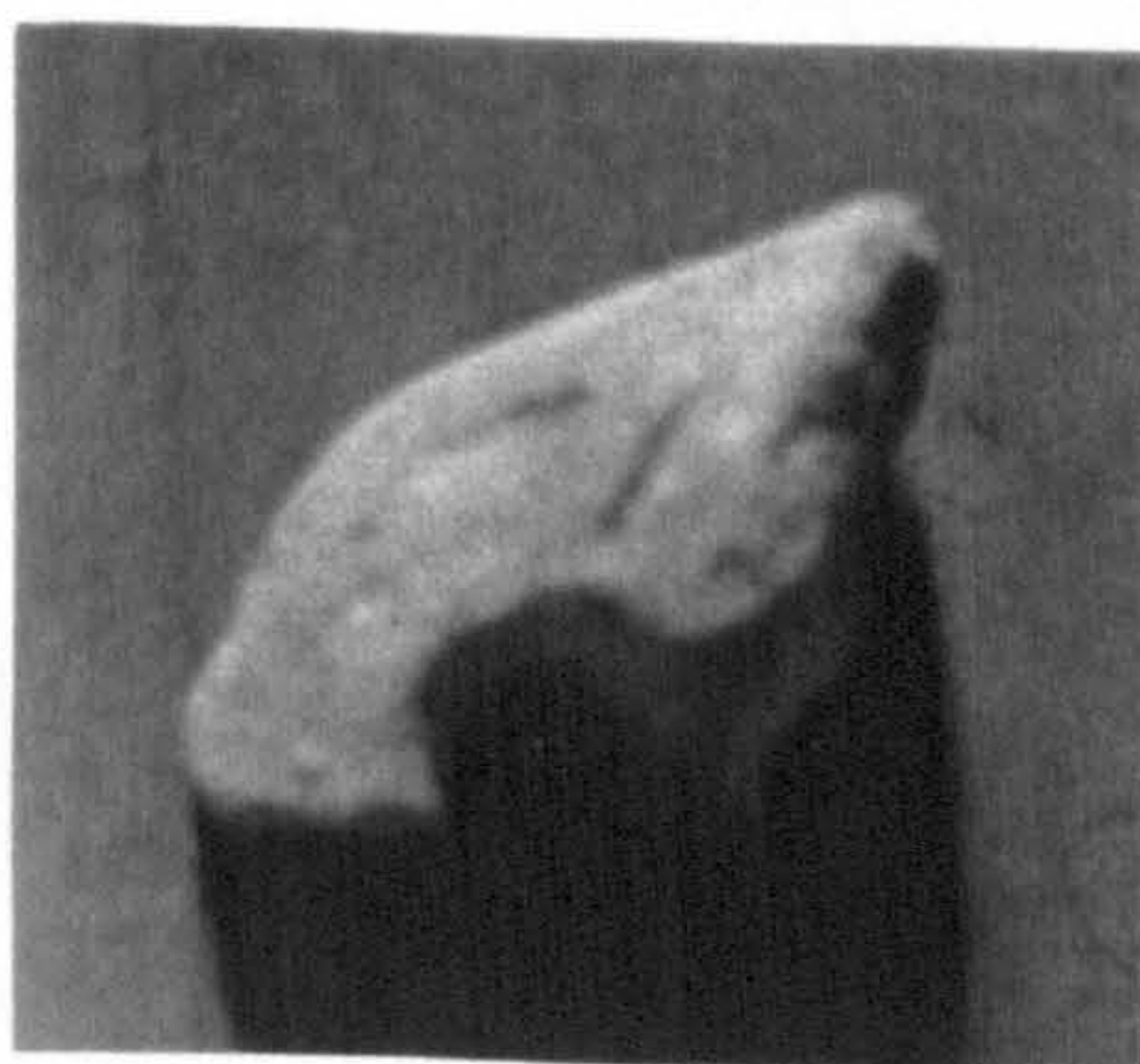
76



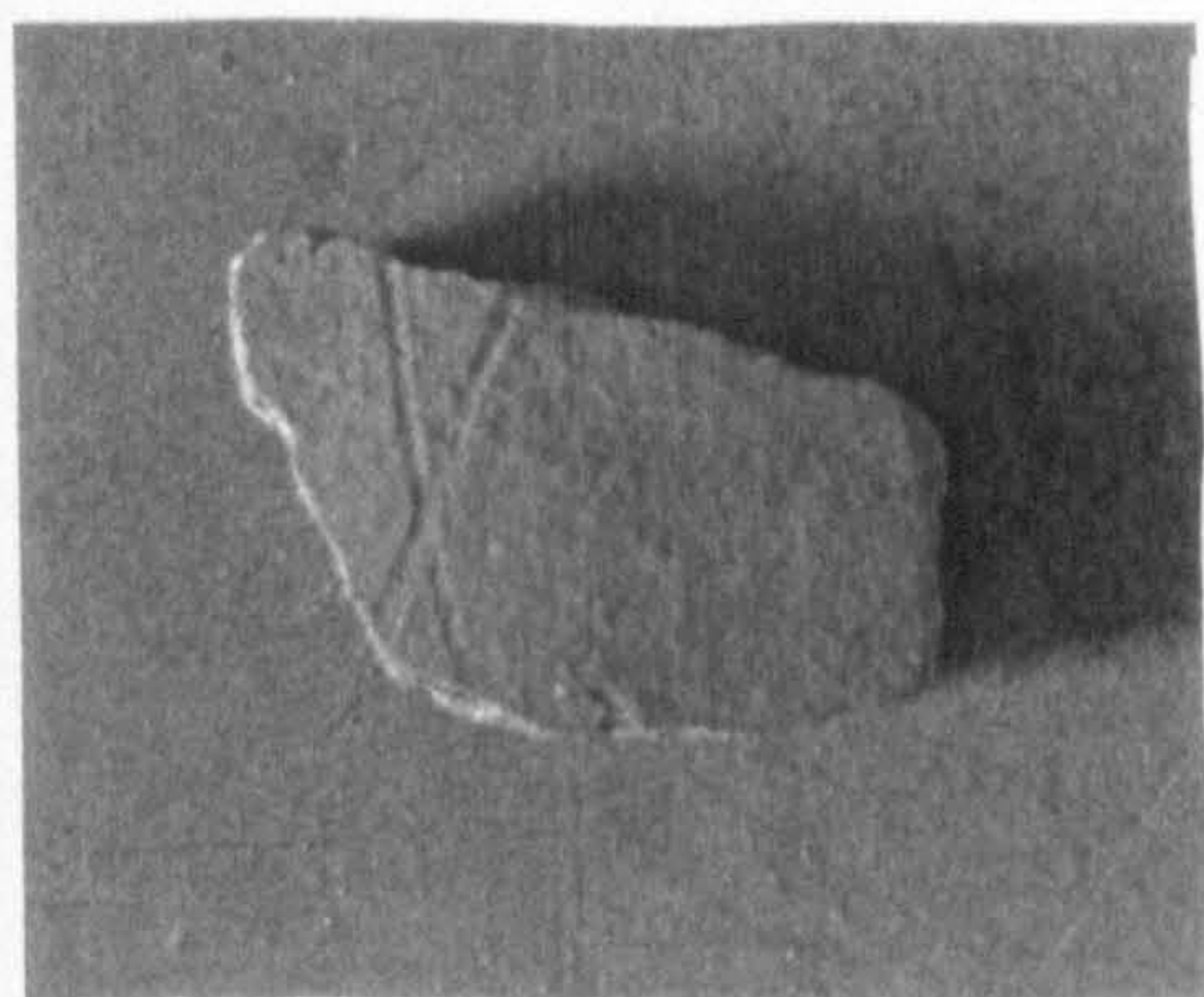
78



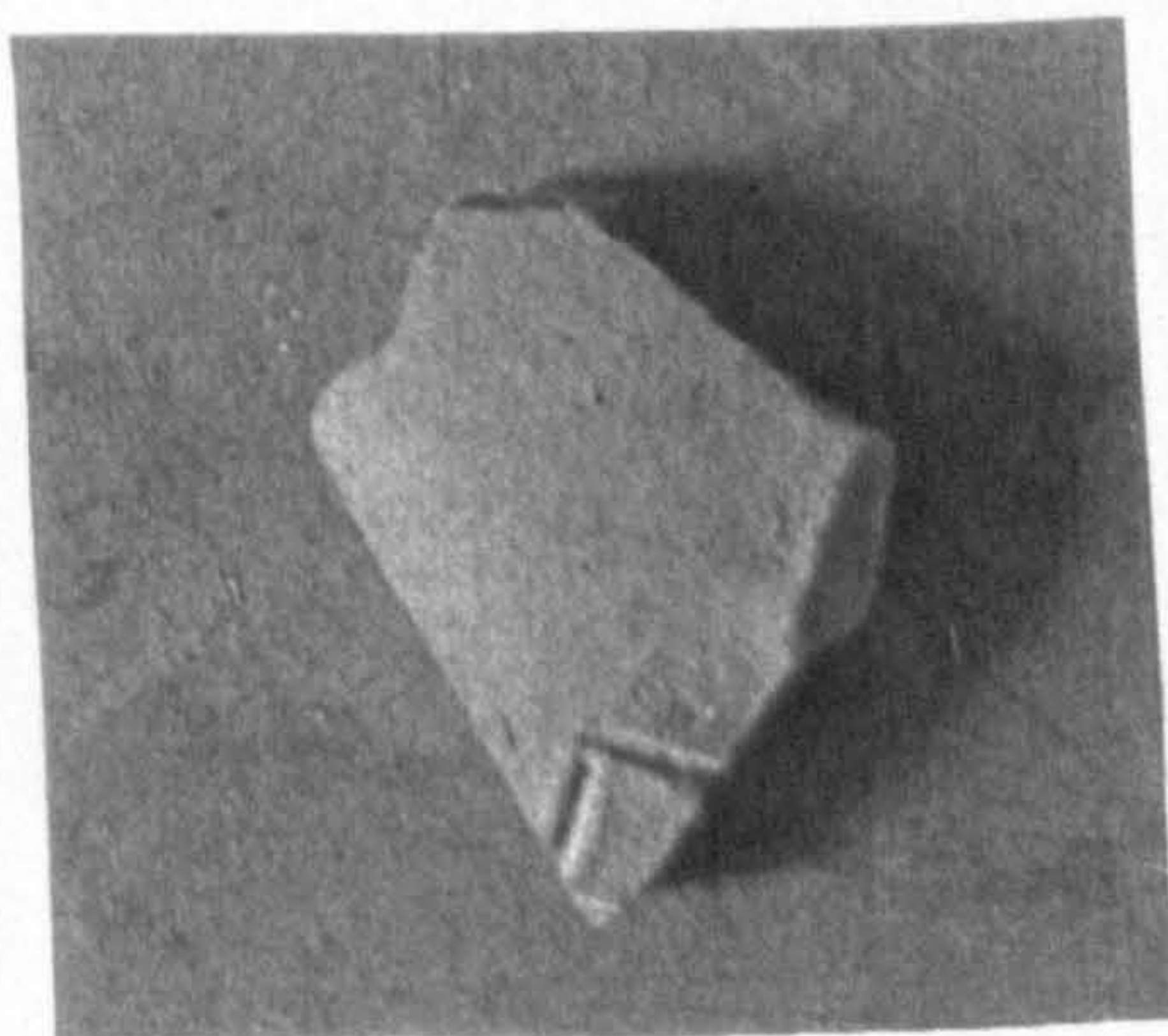
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80

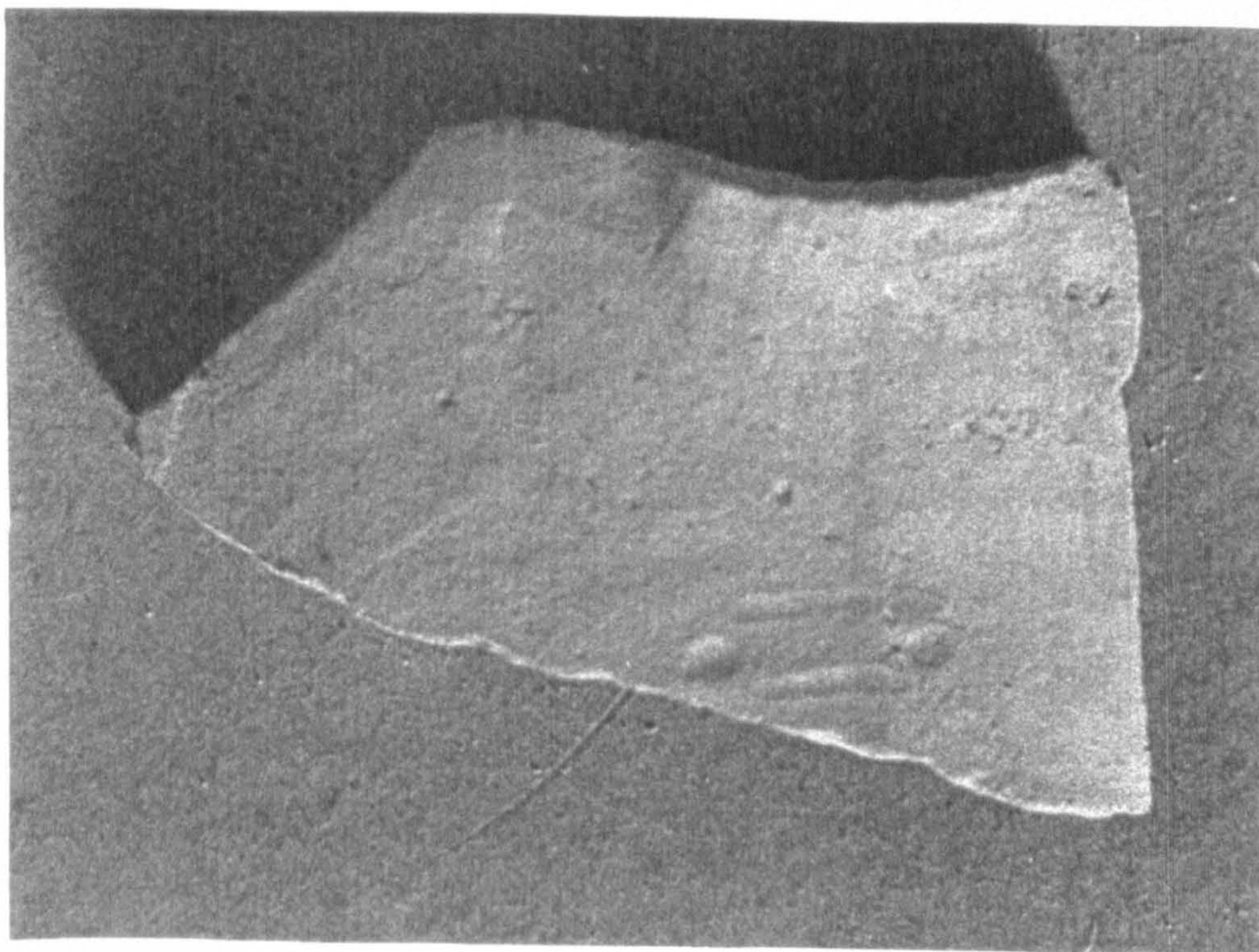


81

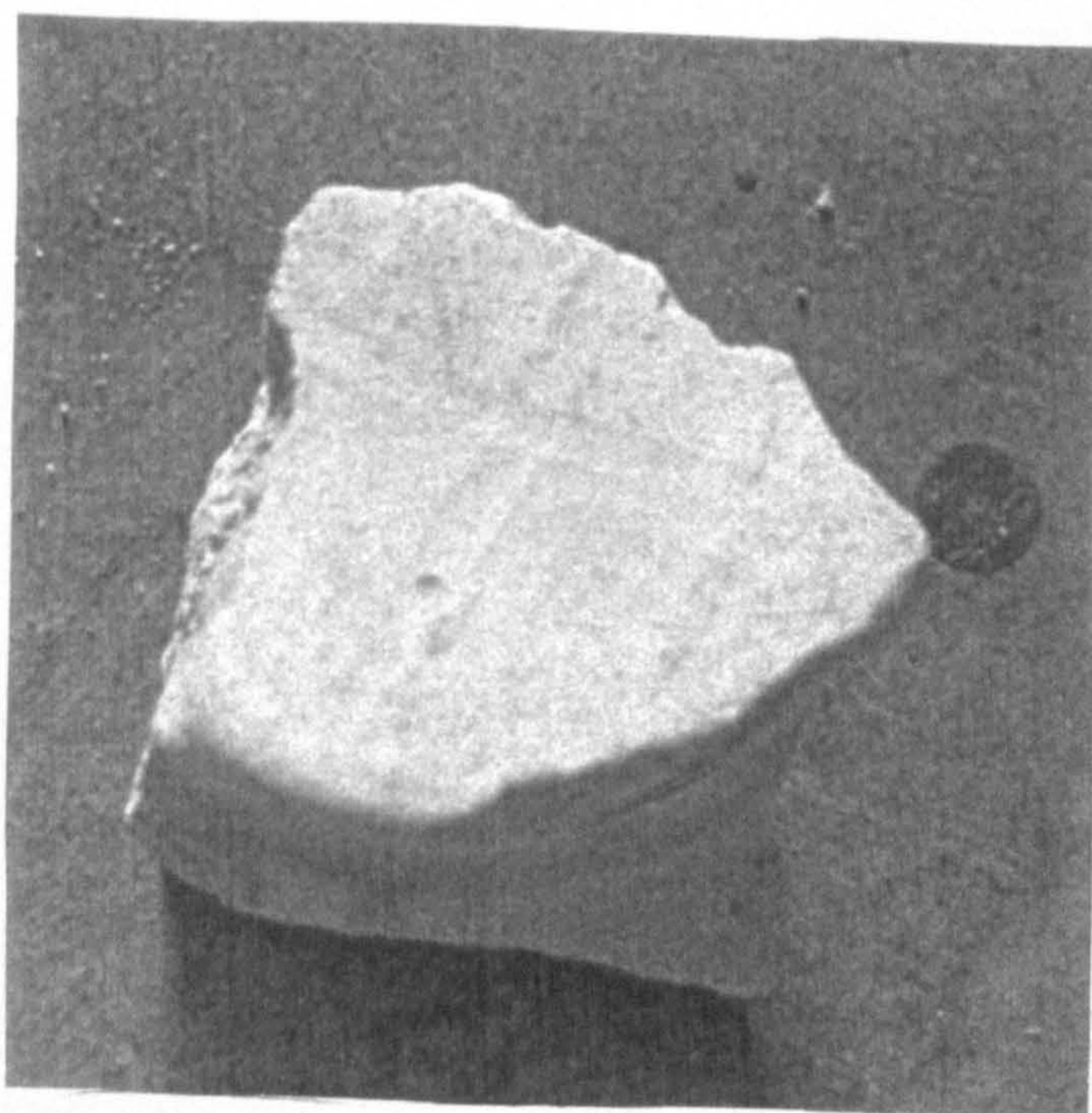


82

XIV. Phylakopi 1974-77 75, 76, 78-82. Various scales

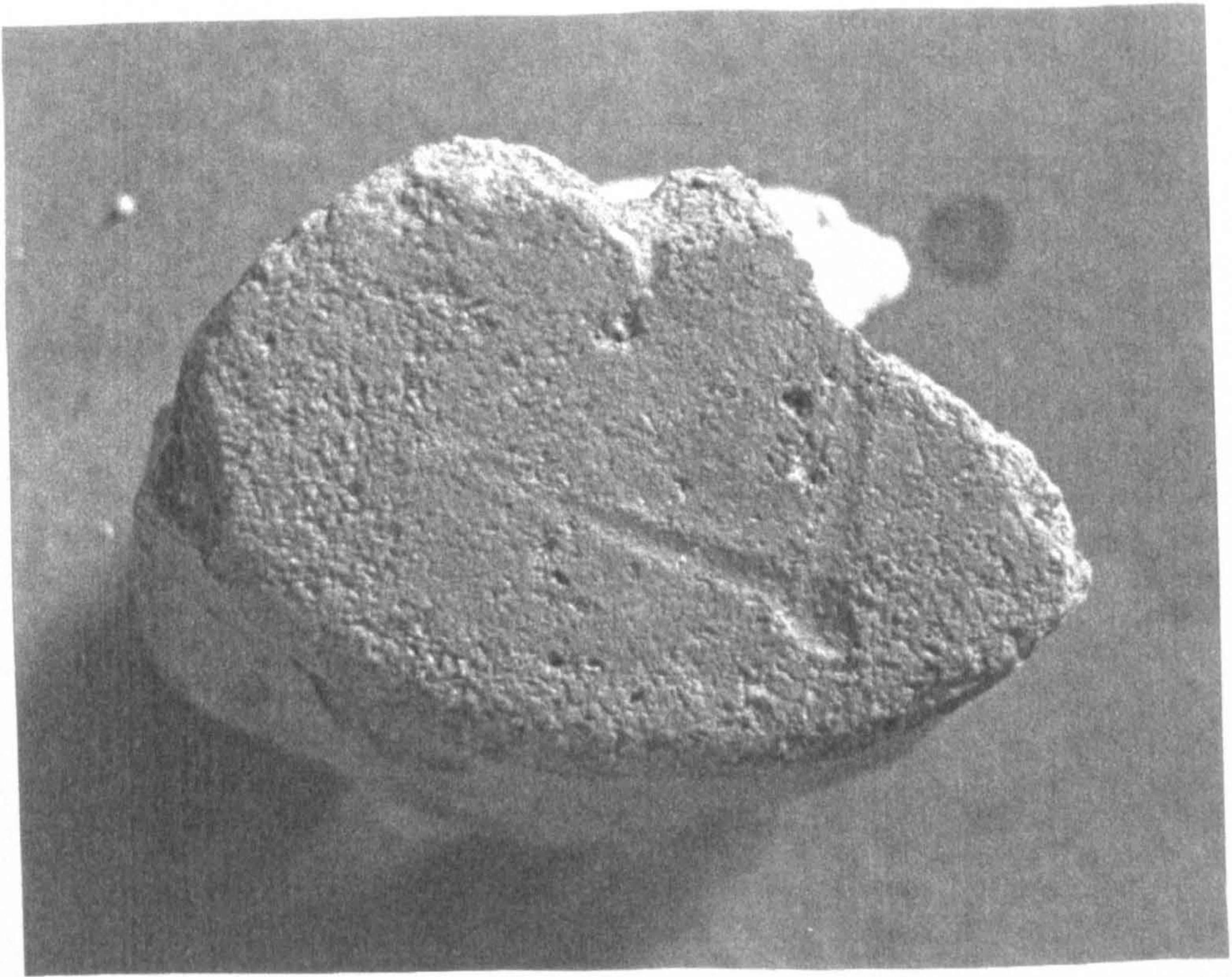


83

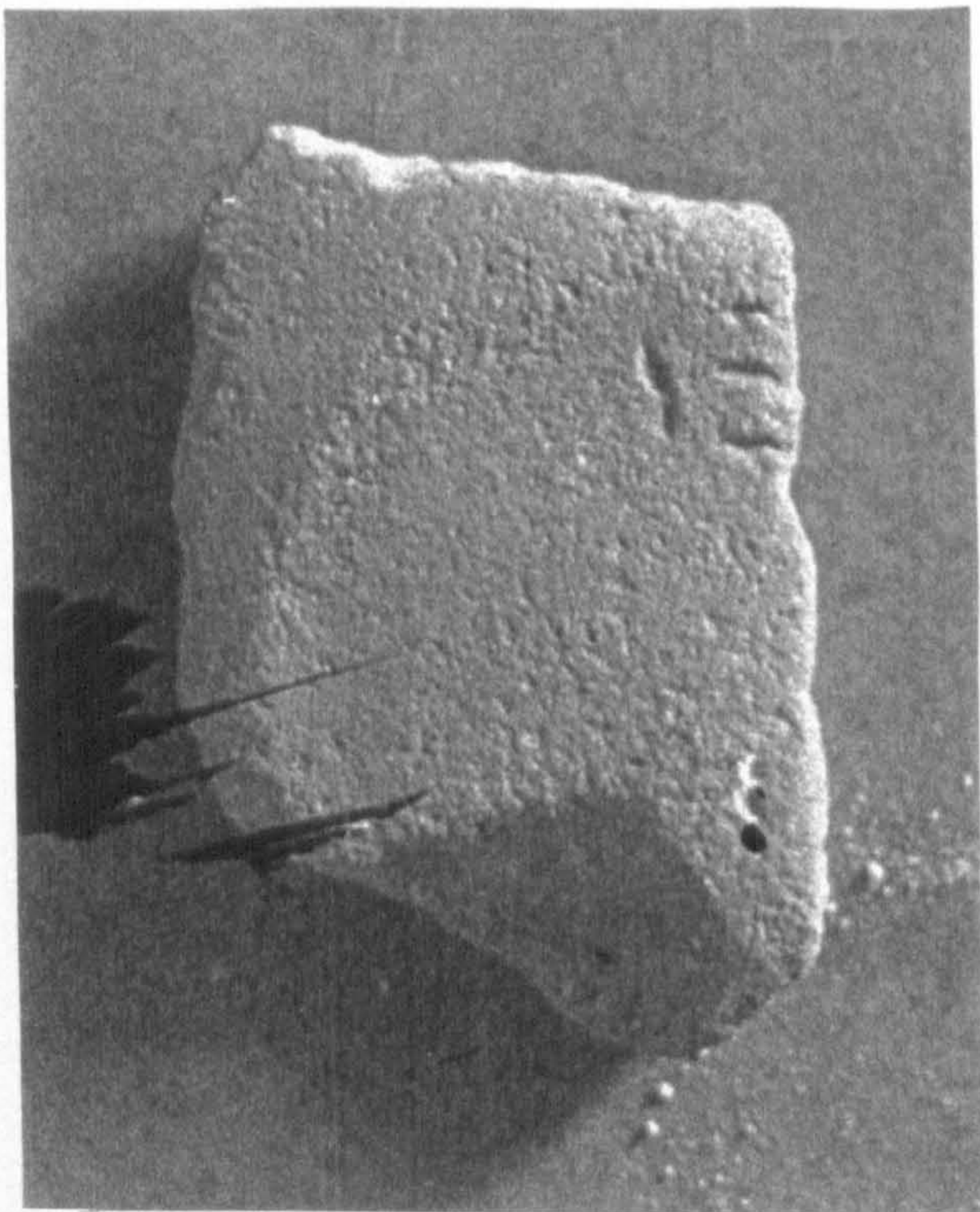


85

XV. Phylakopi 1974-77 83, 85. Various scales



86

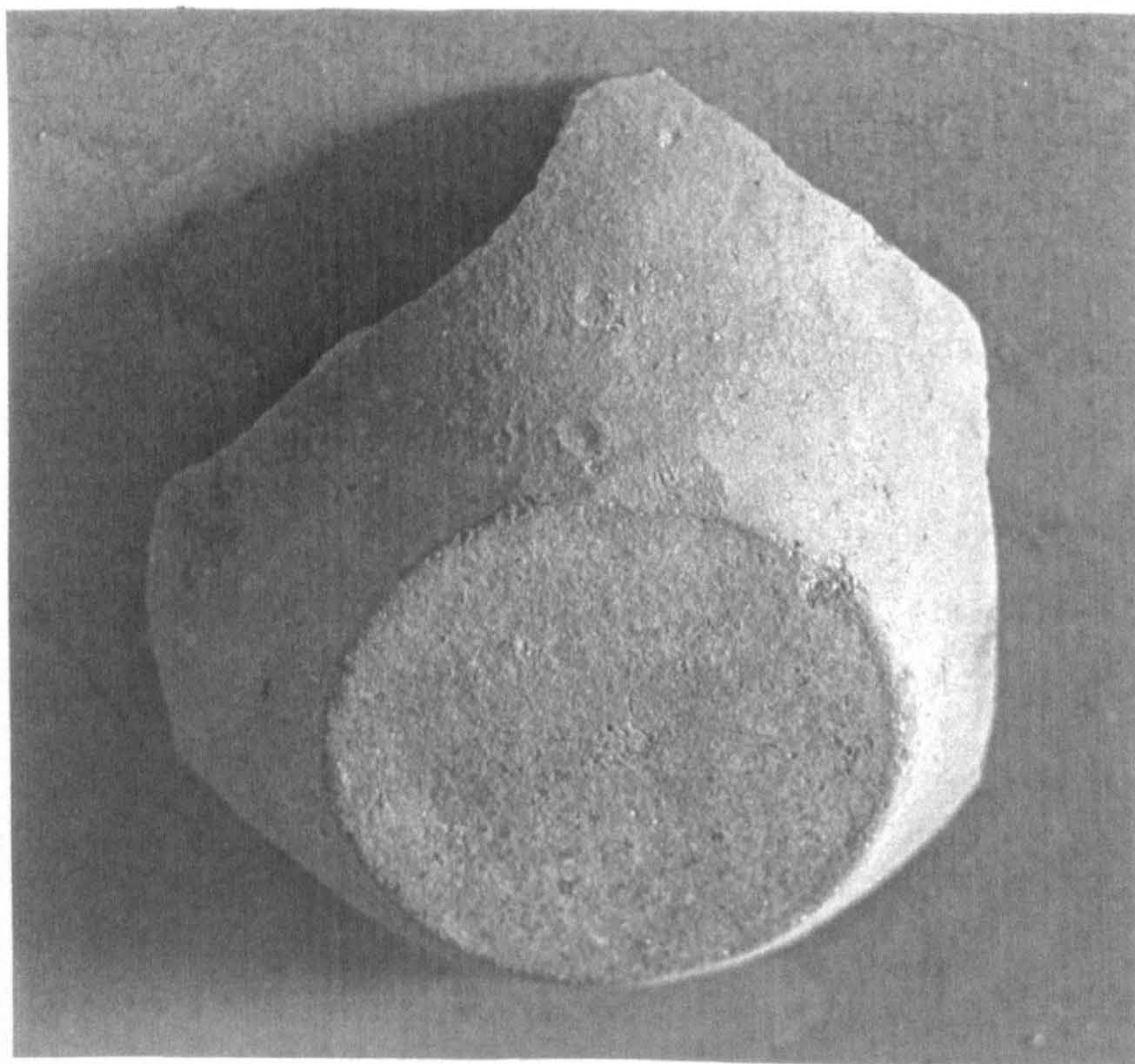


87

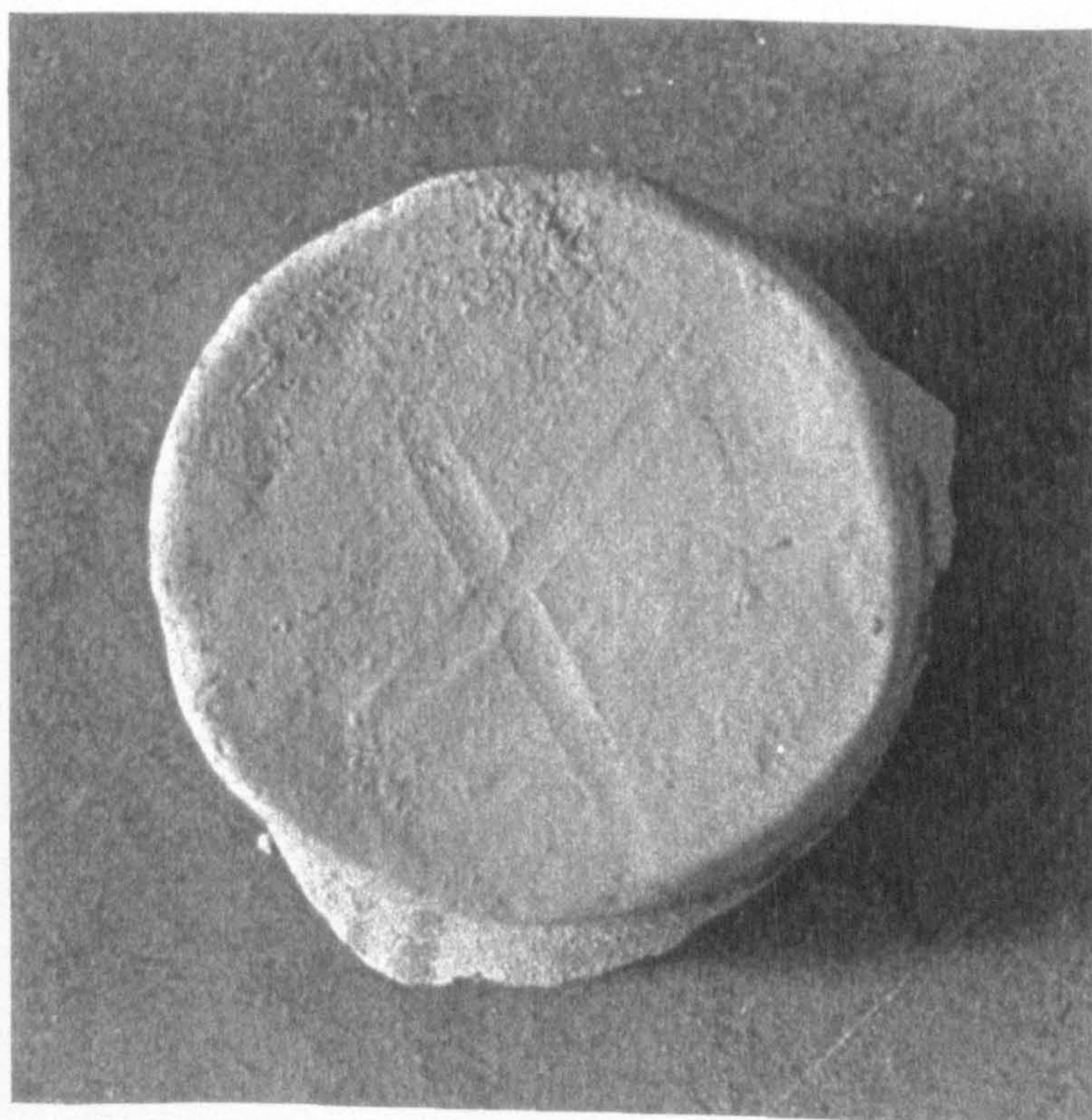


88

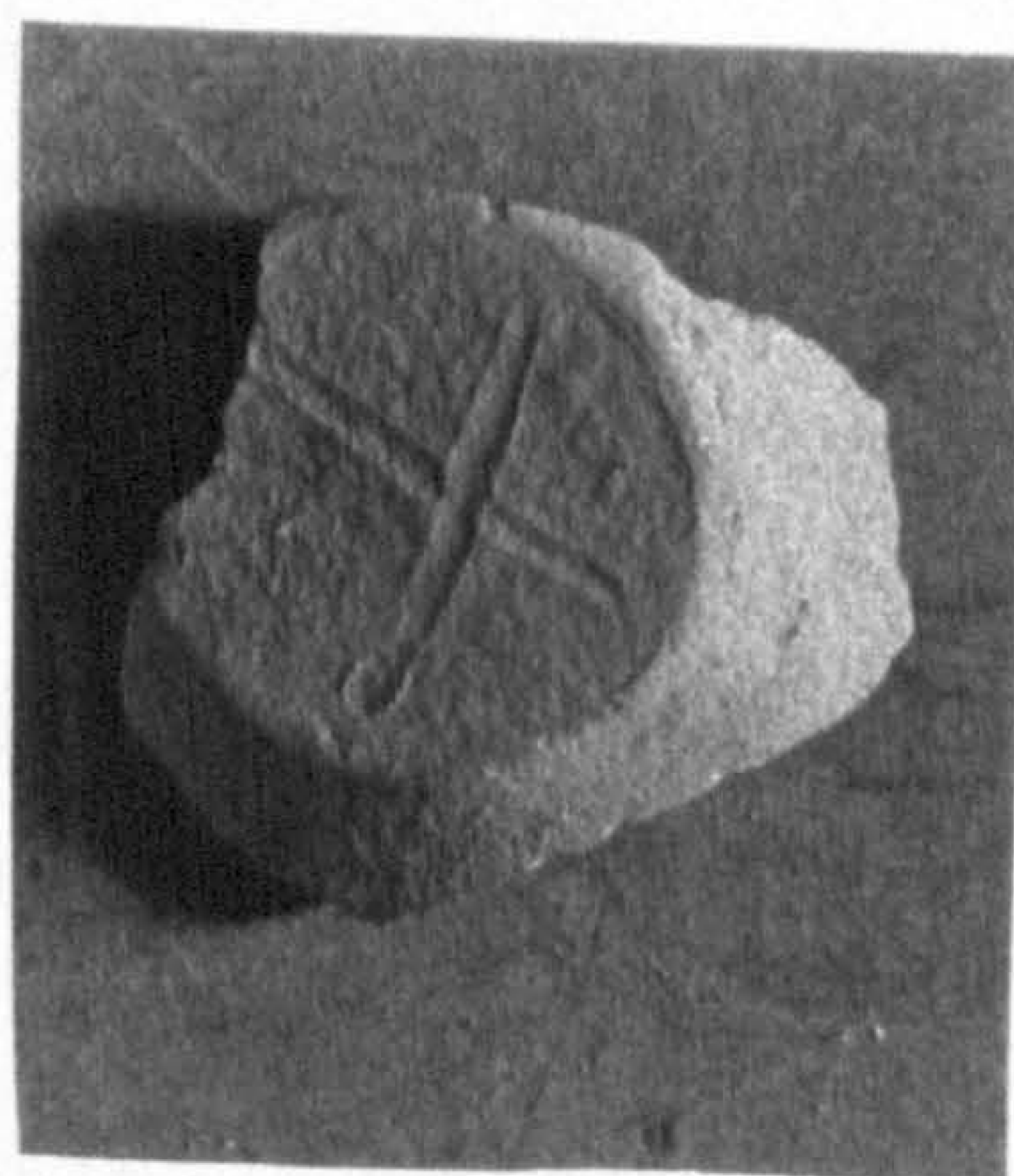
XVI. Phylakopi 1974-77 86-88. Various scales



89



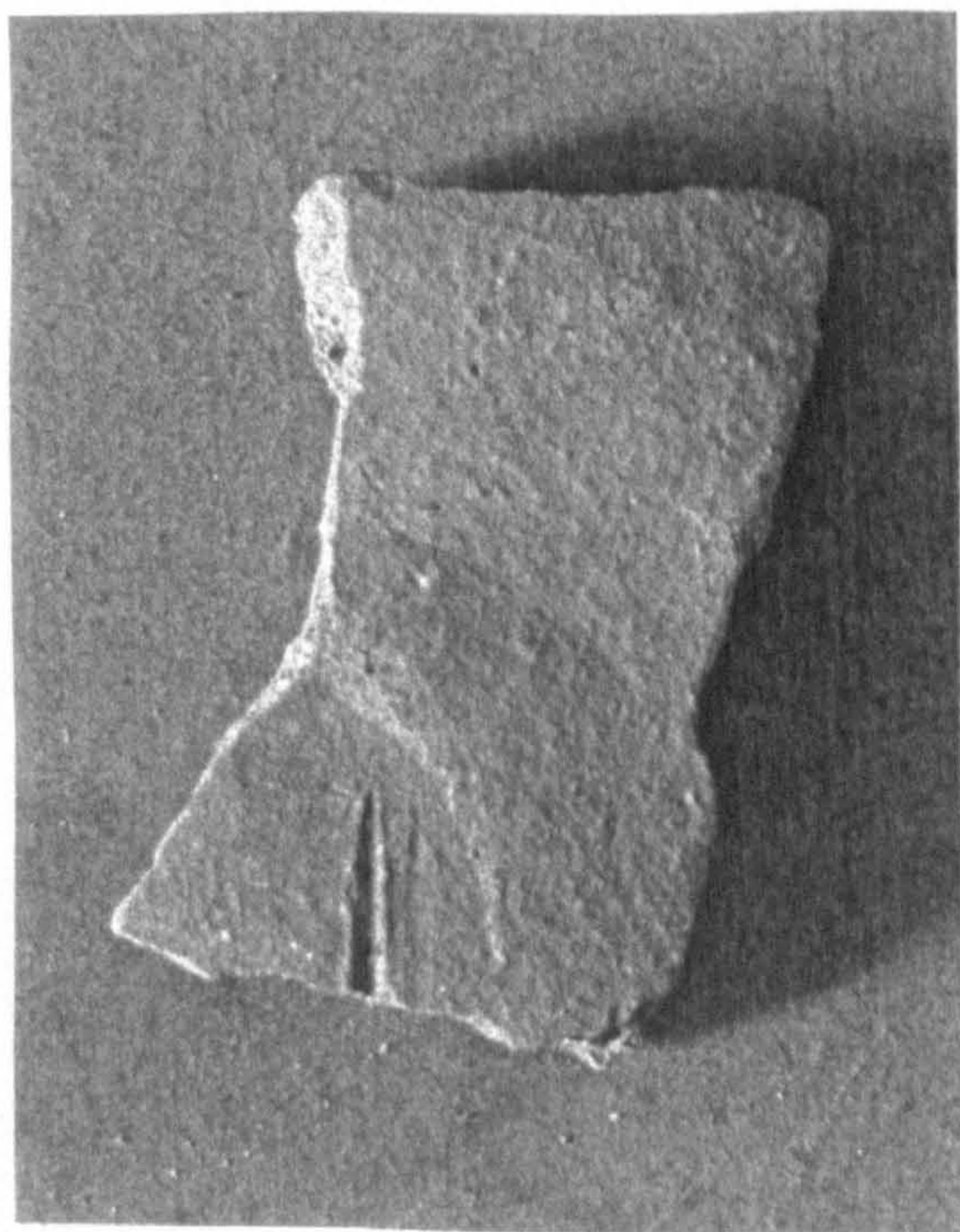
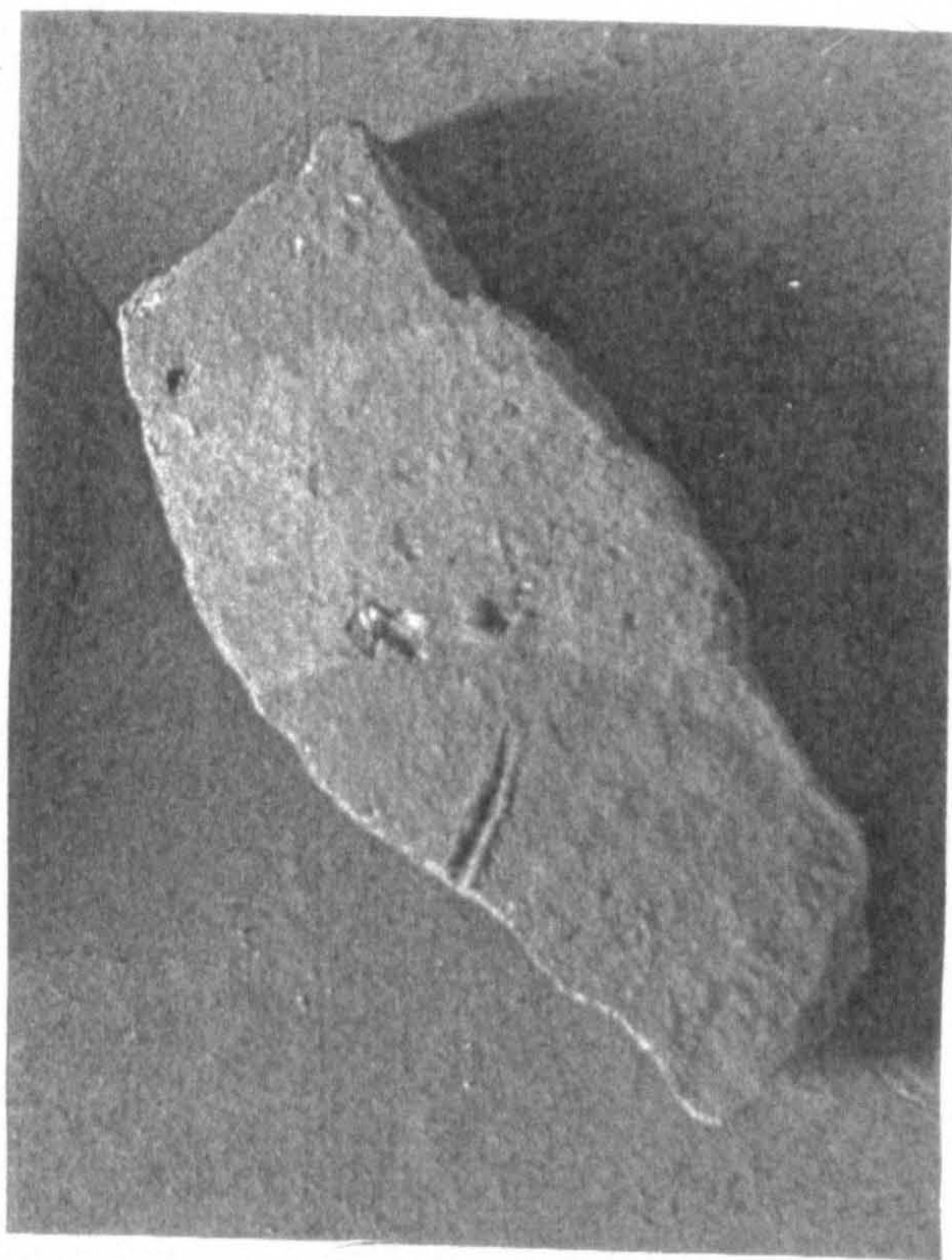
90



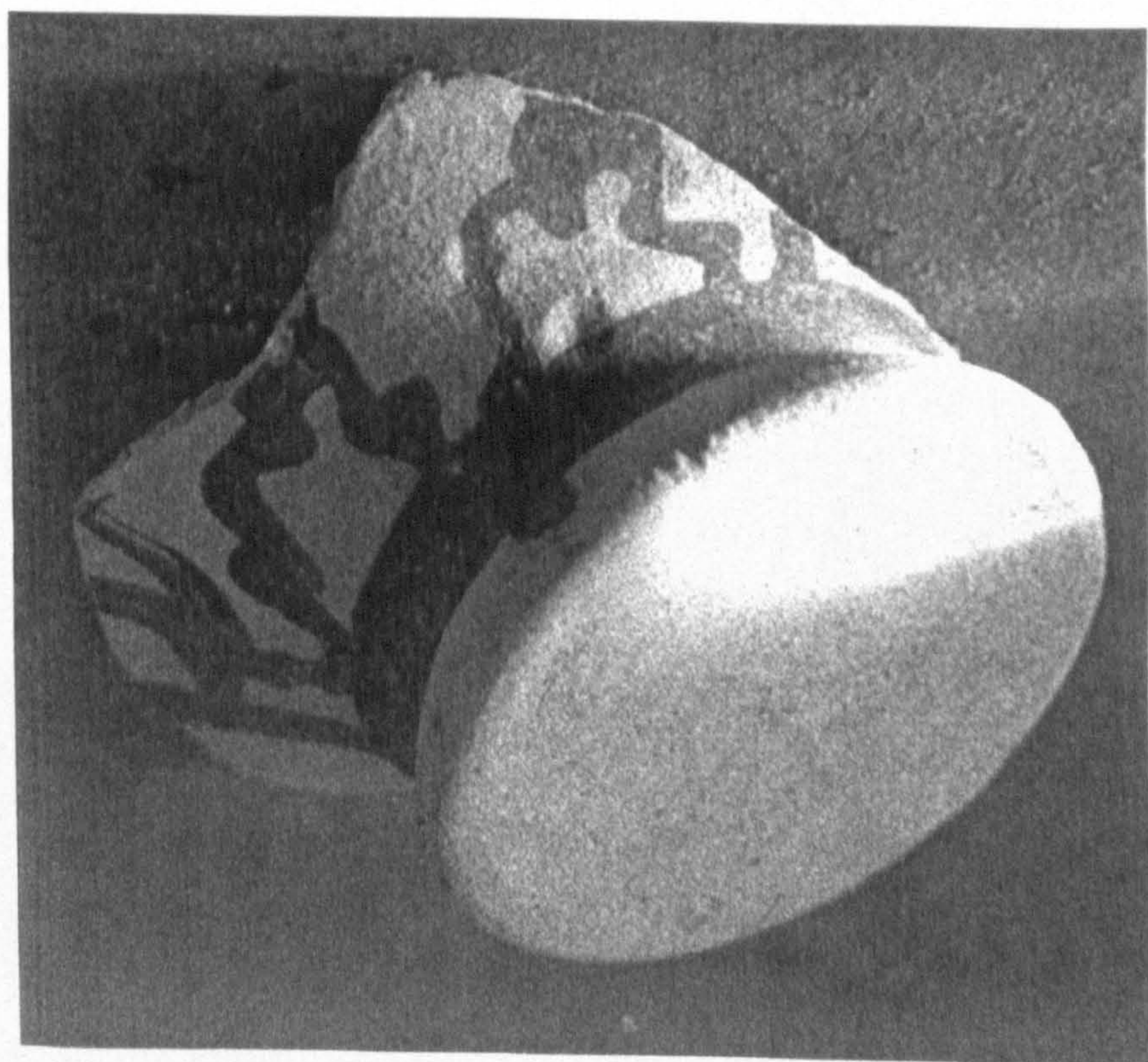
91

XVII. Phylakopi 1974-77 89-91. Various scales

289

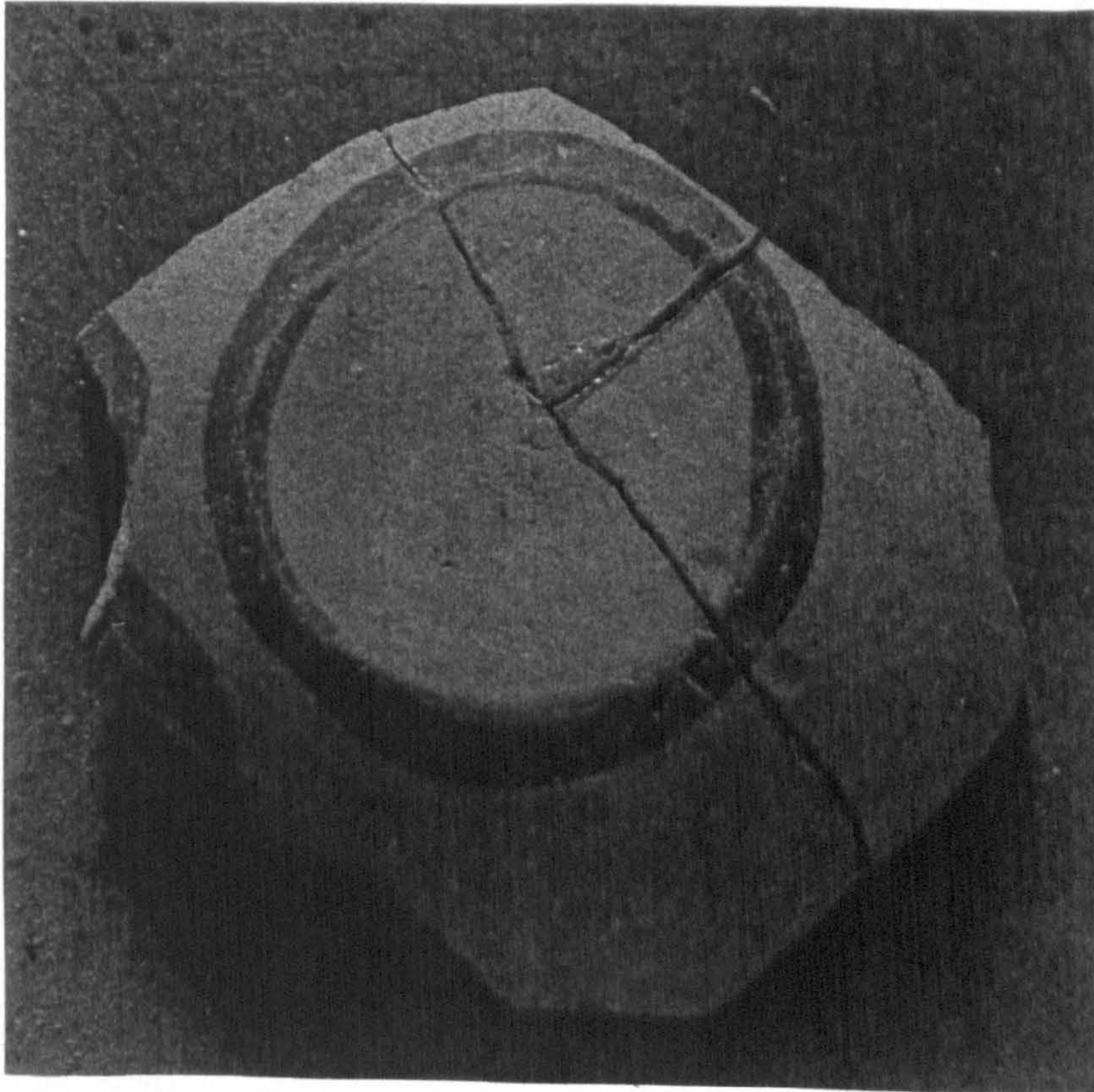


92

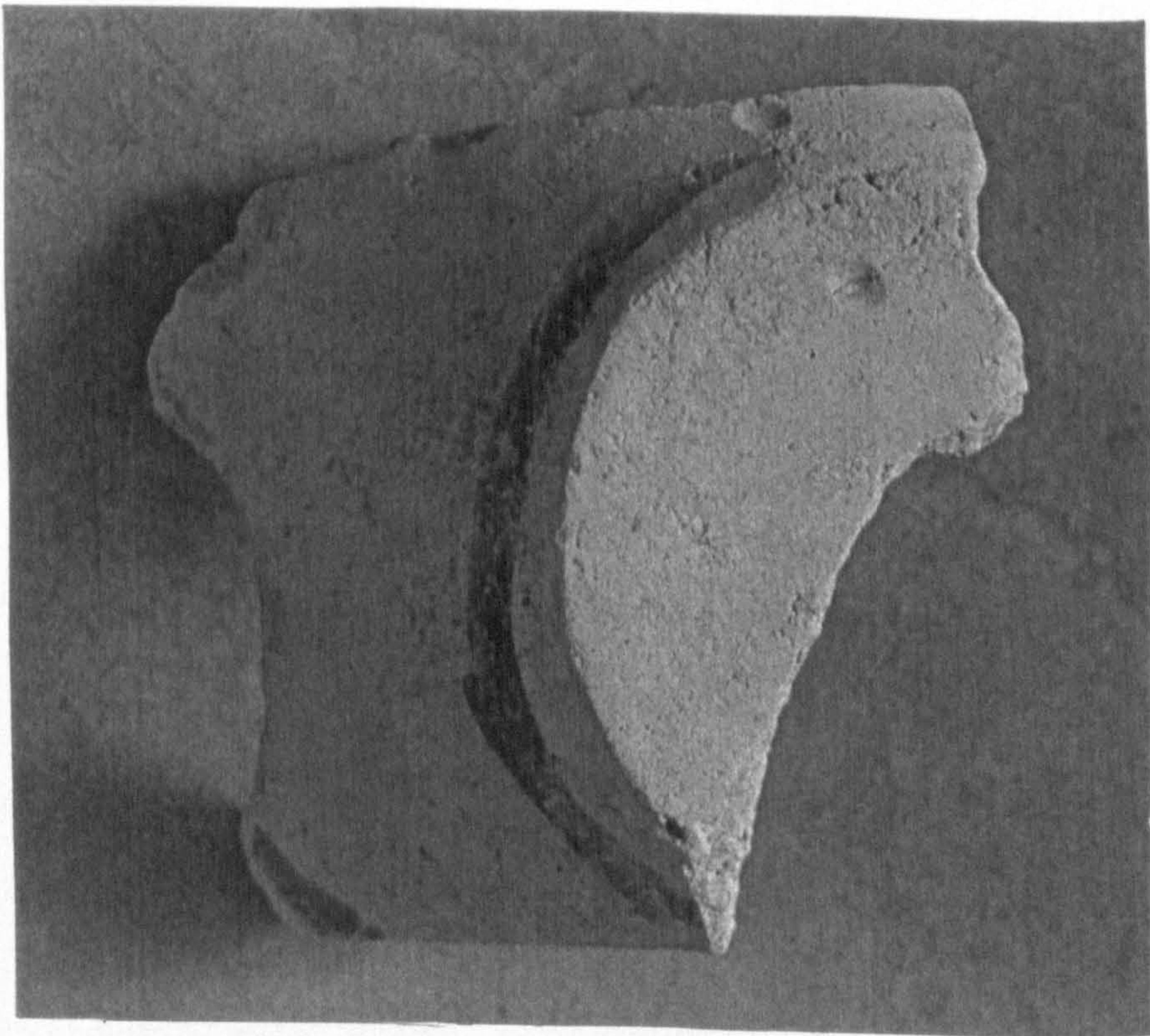


93

XVIII. Phylakopi 1974-77 92, 93. Various scales

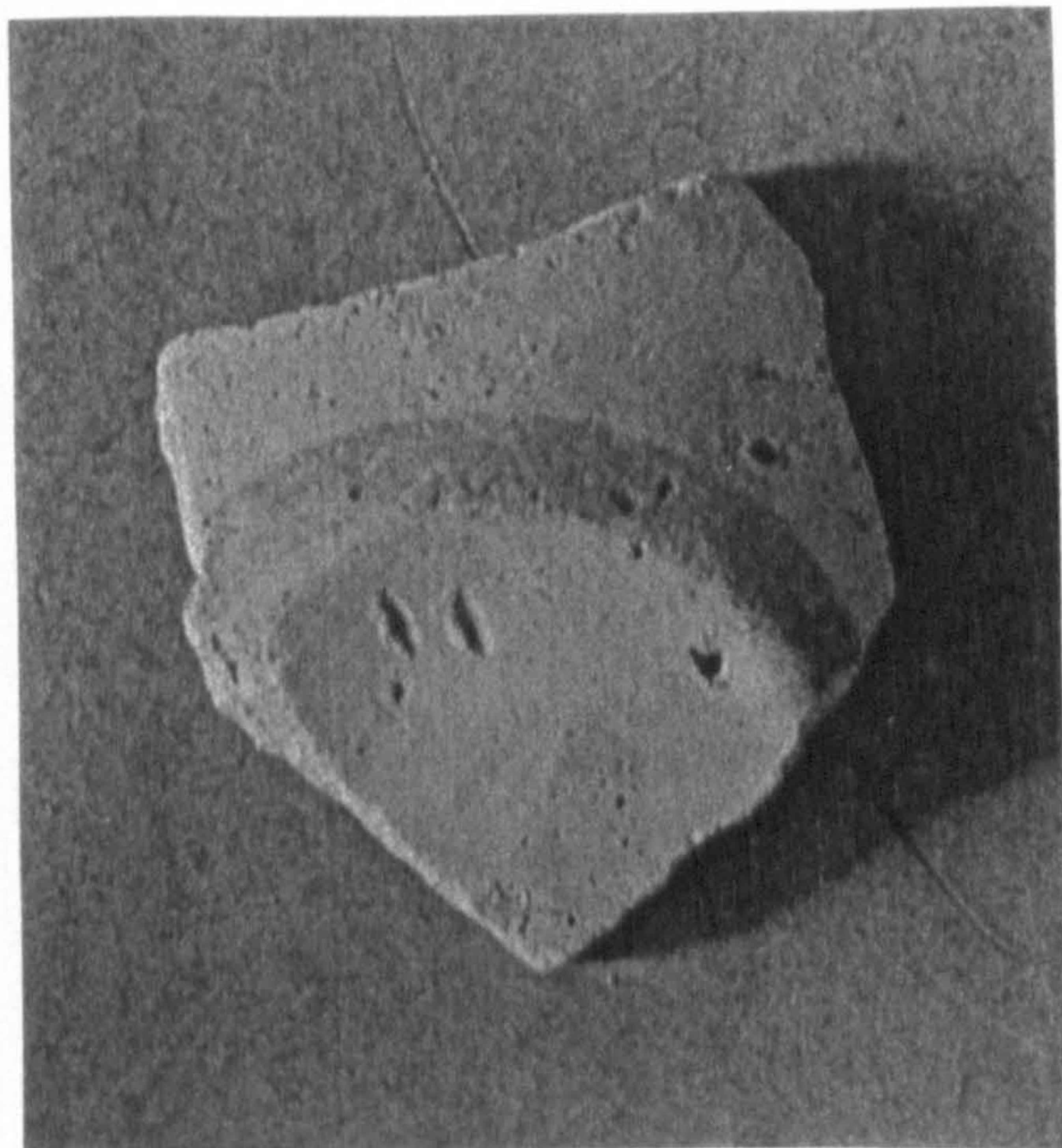


94

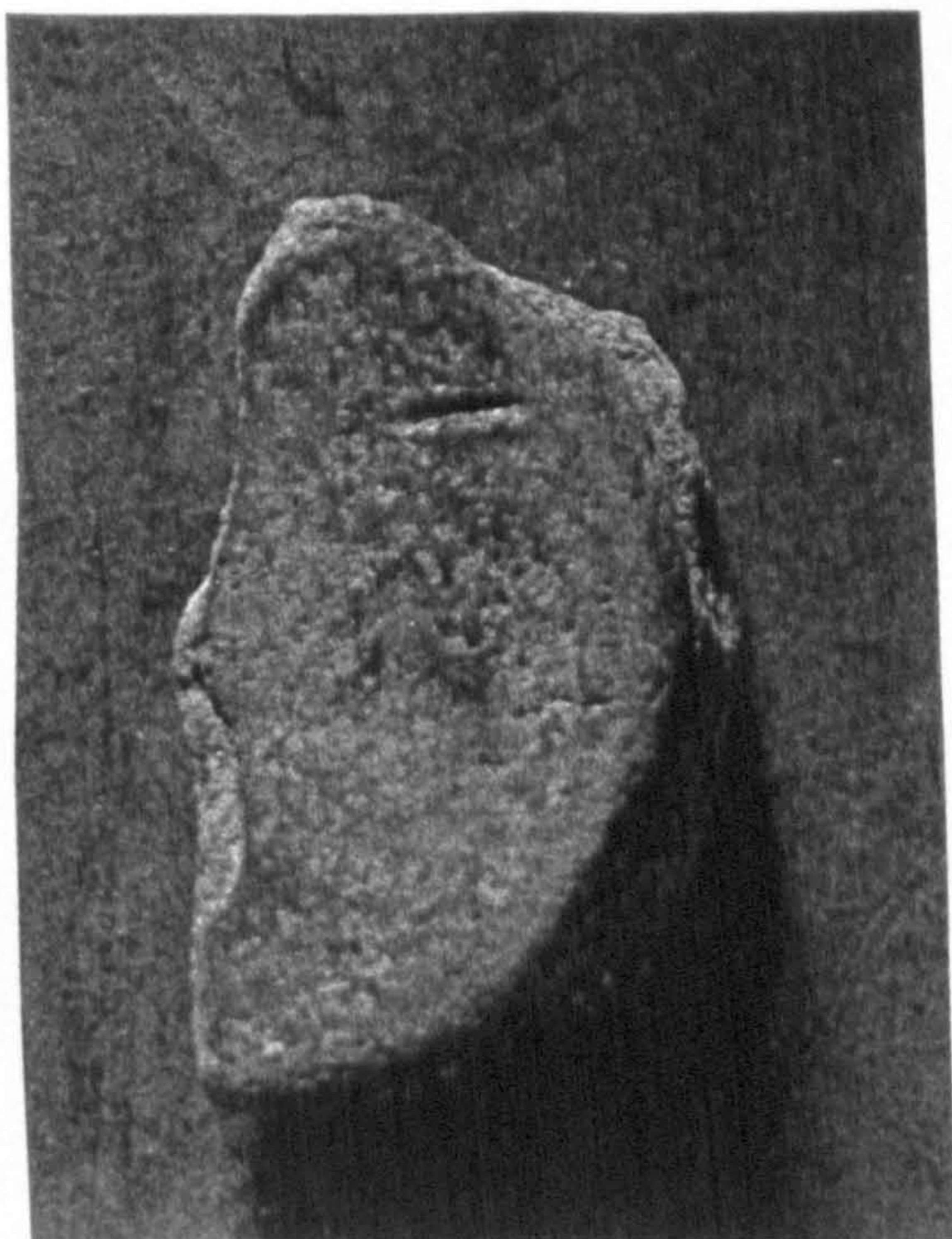


95

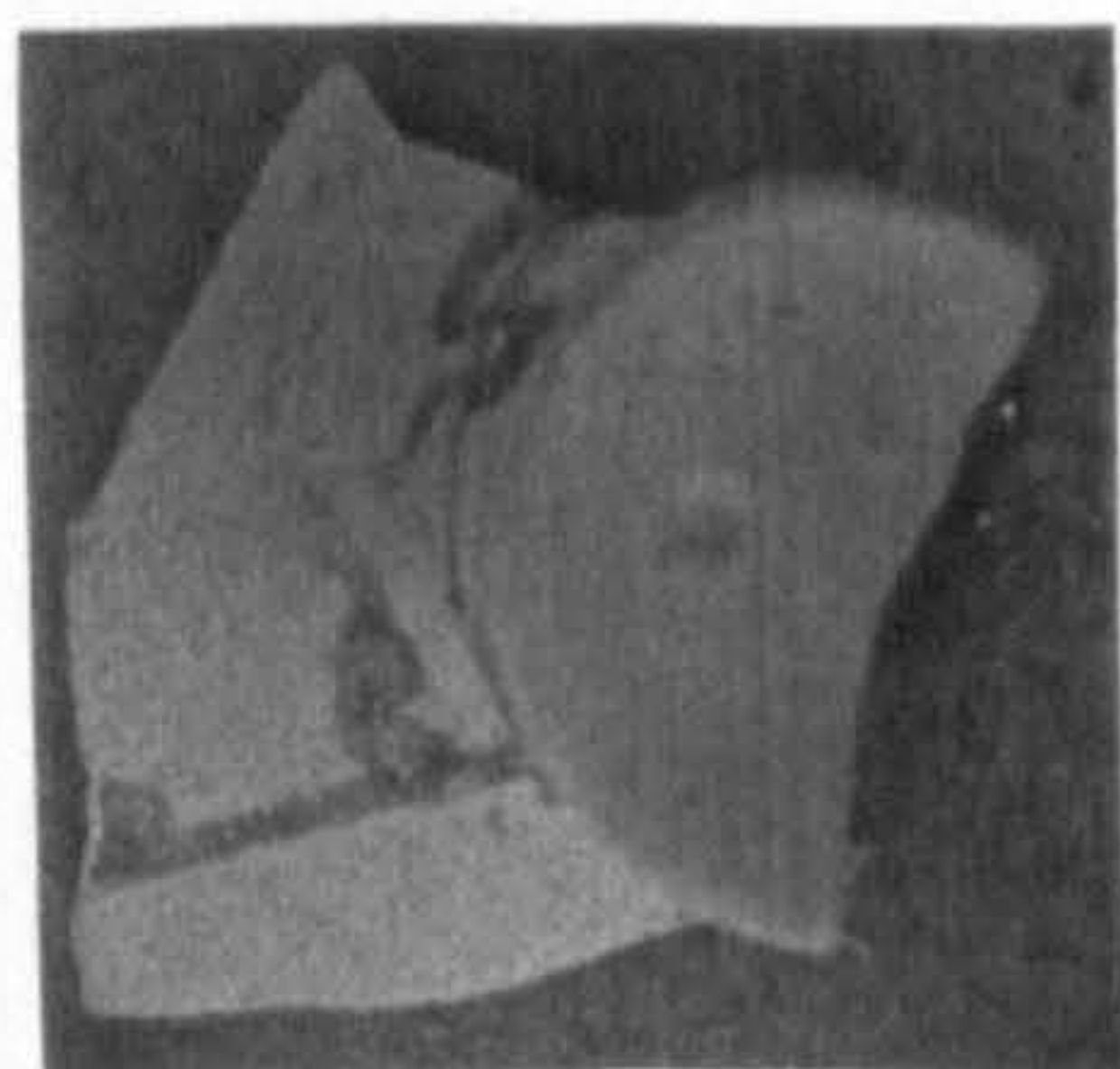
XIX. Phylakopi 1974-77 94,95. Various scales



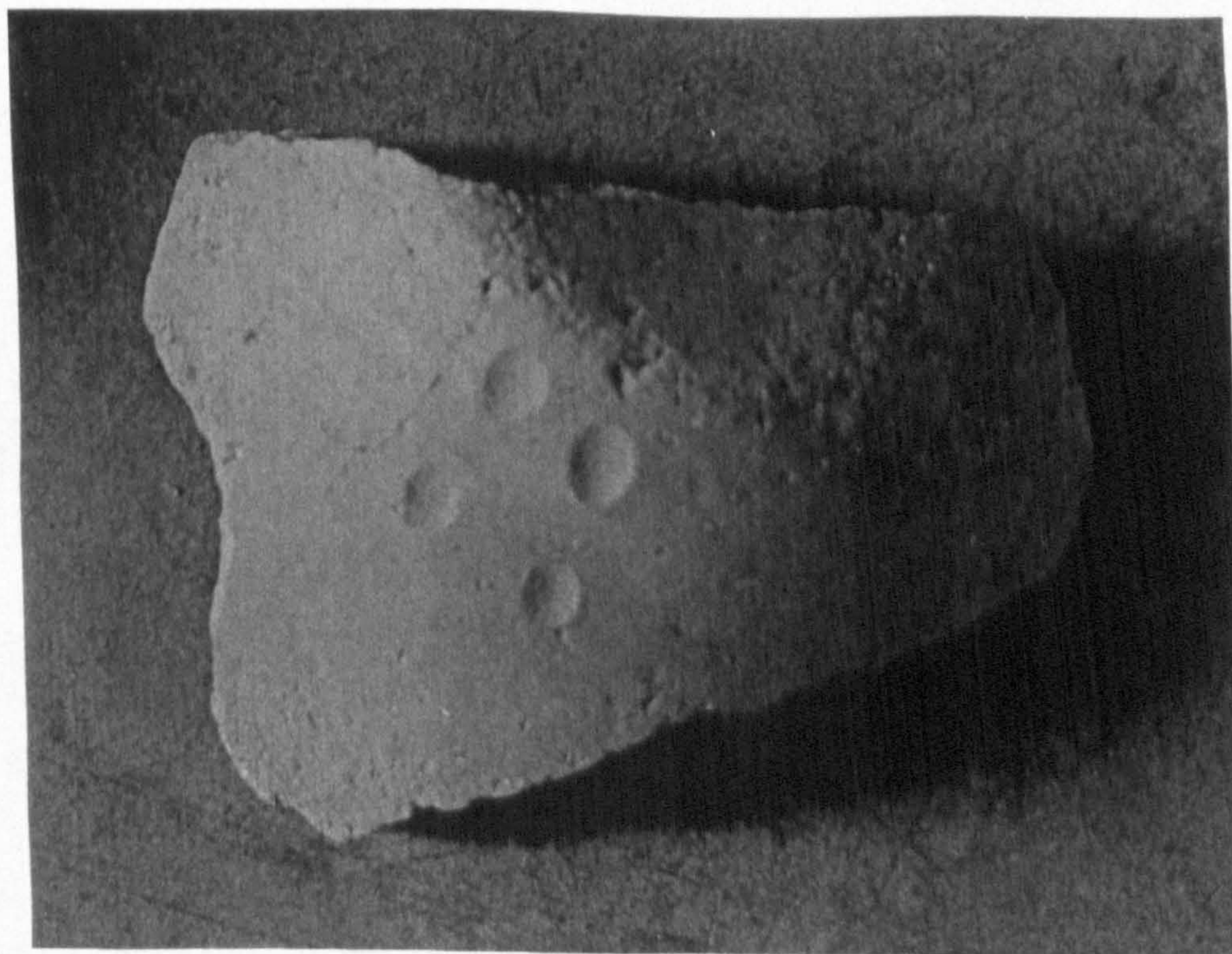
97



98

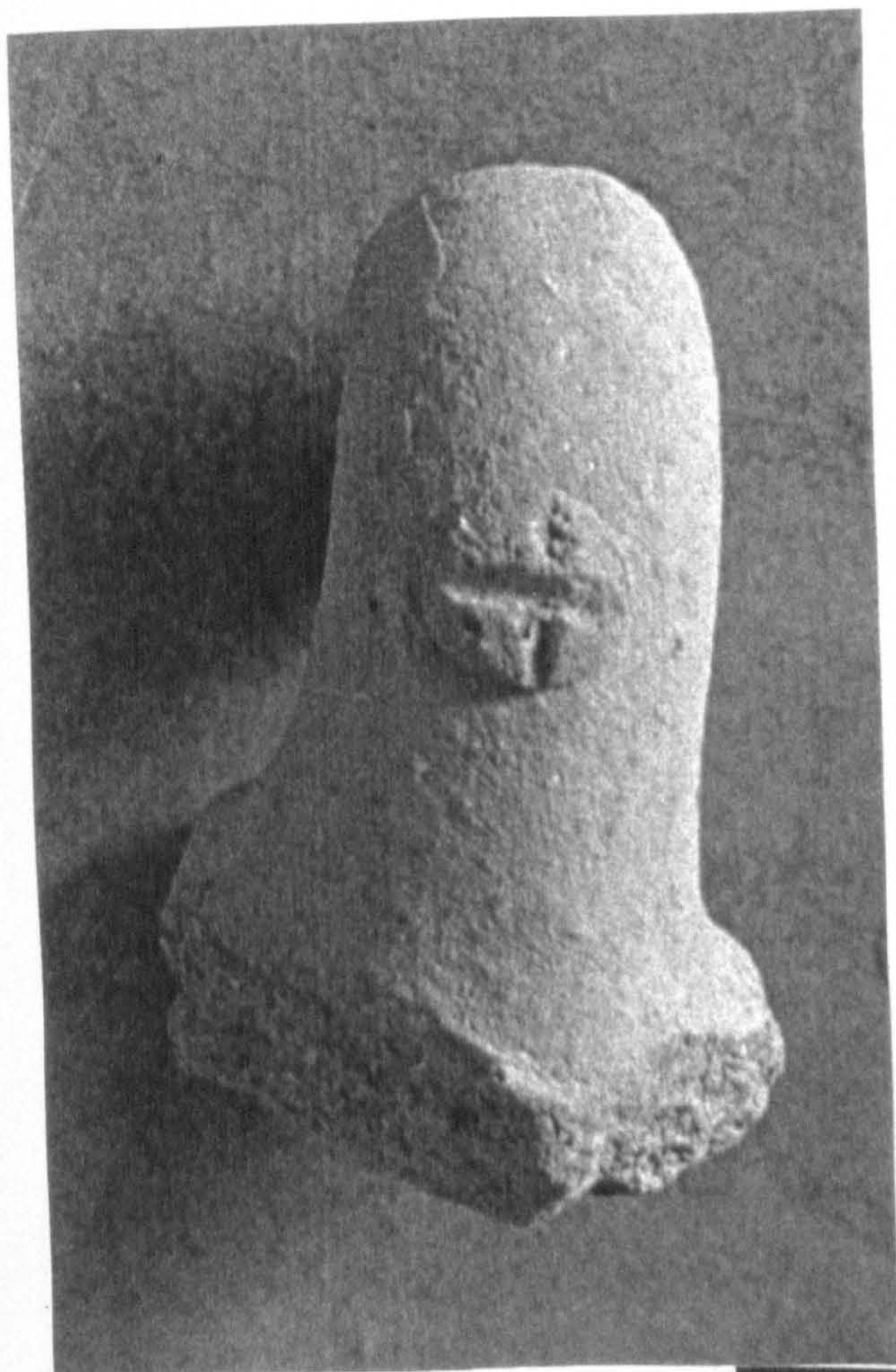


96

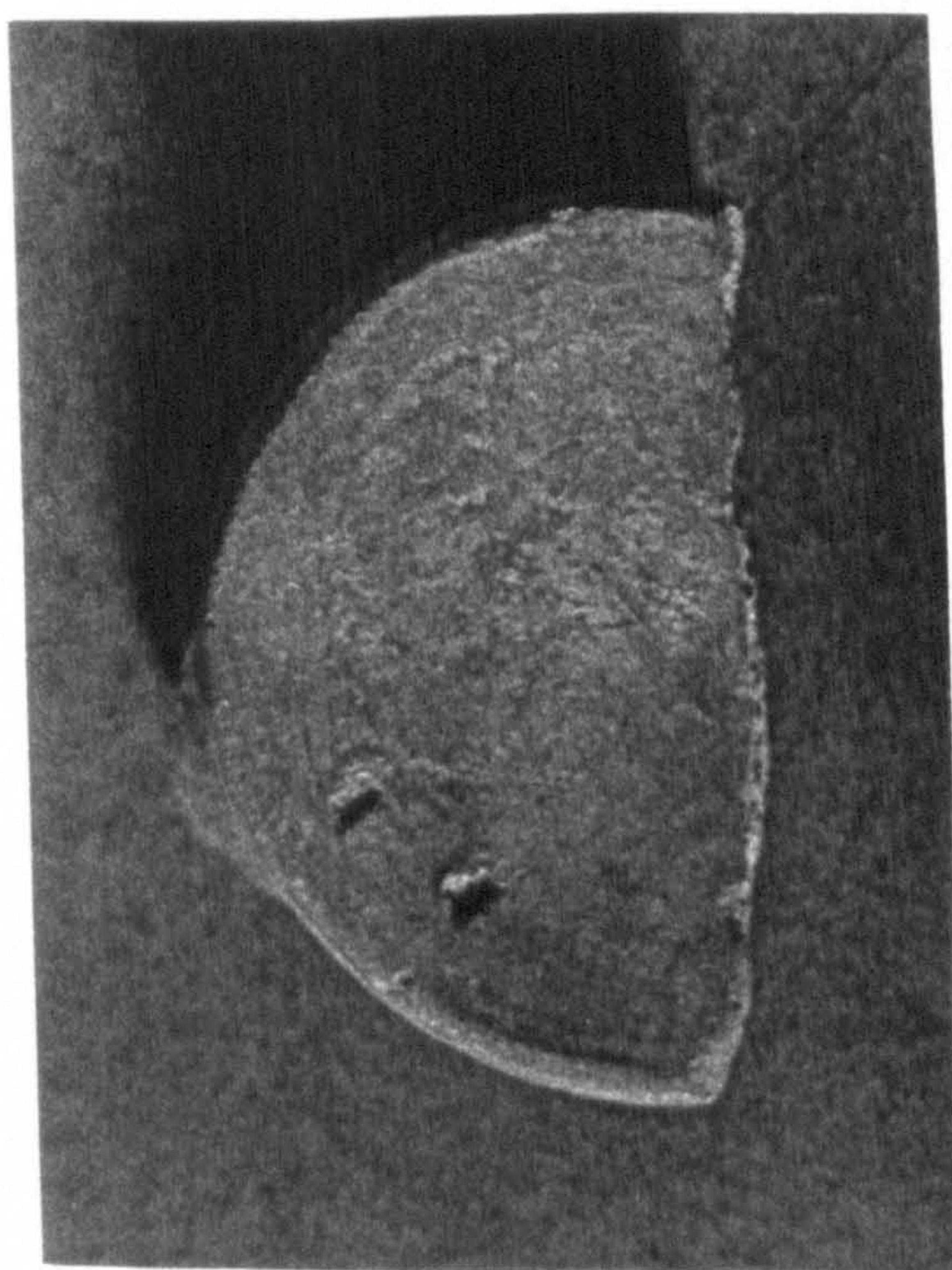


99

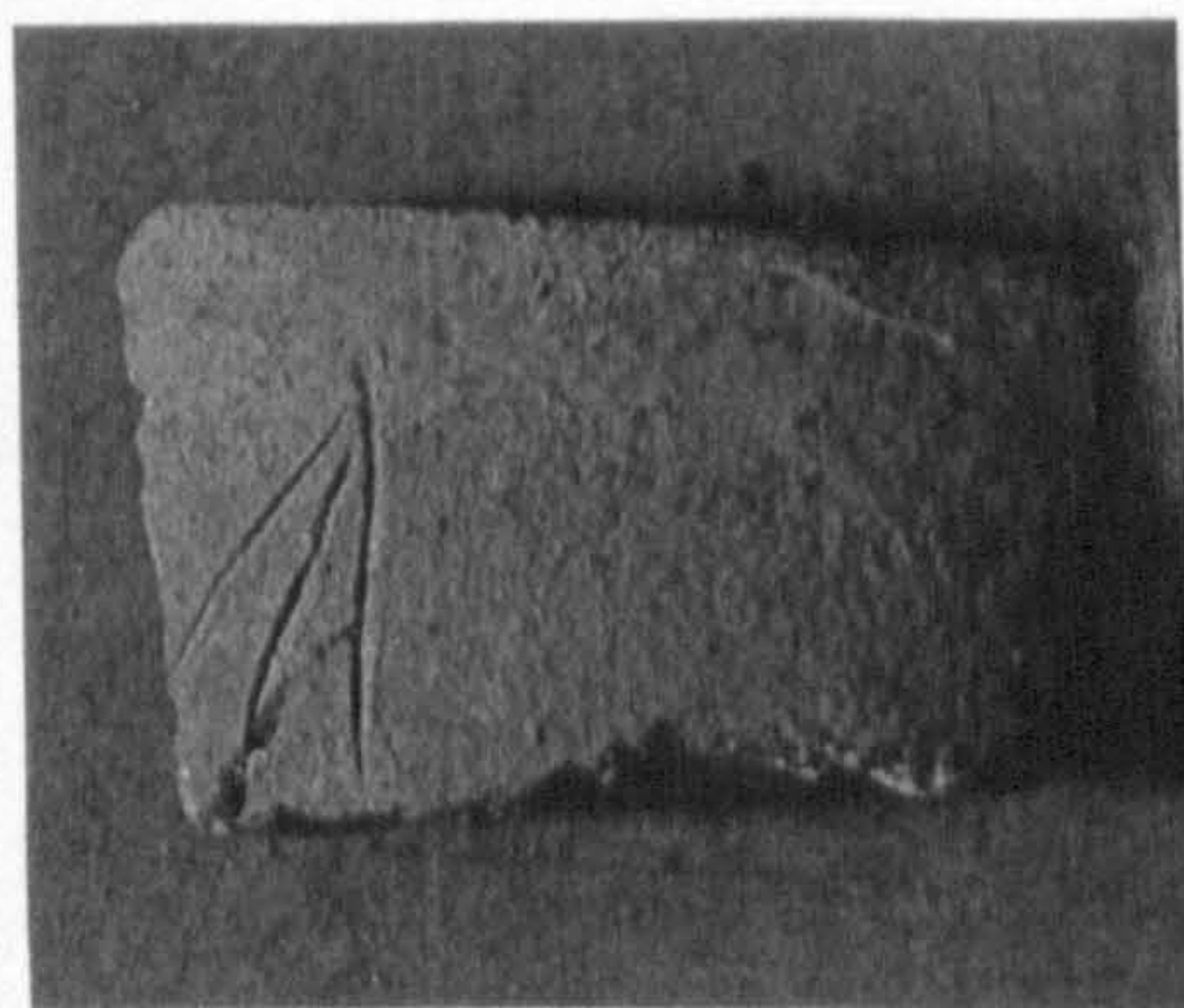
XX. Phylakopi 1974-77 96-99. Various scales



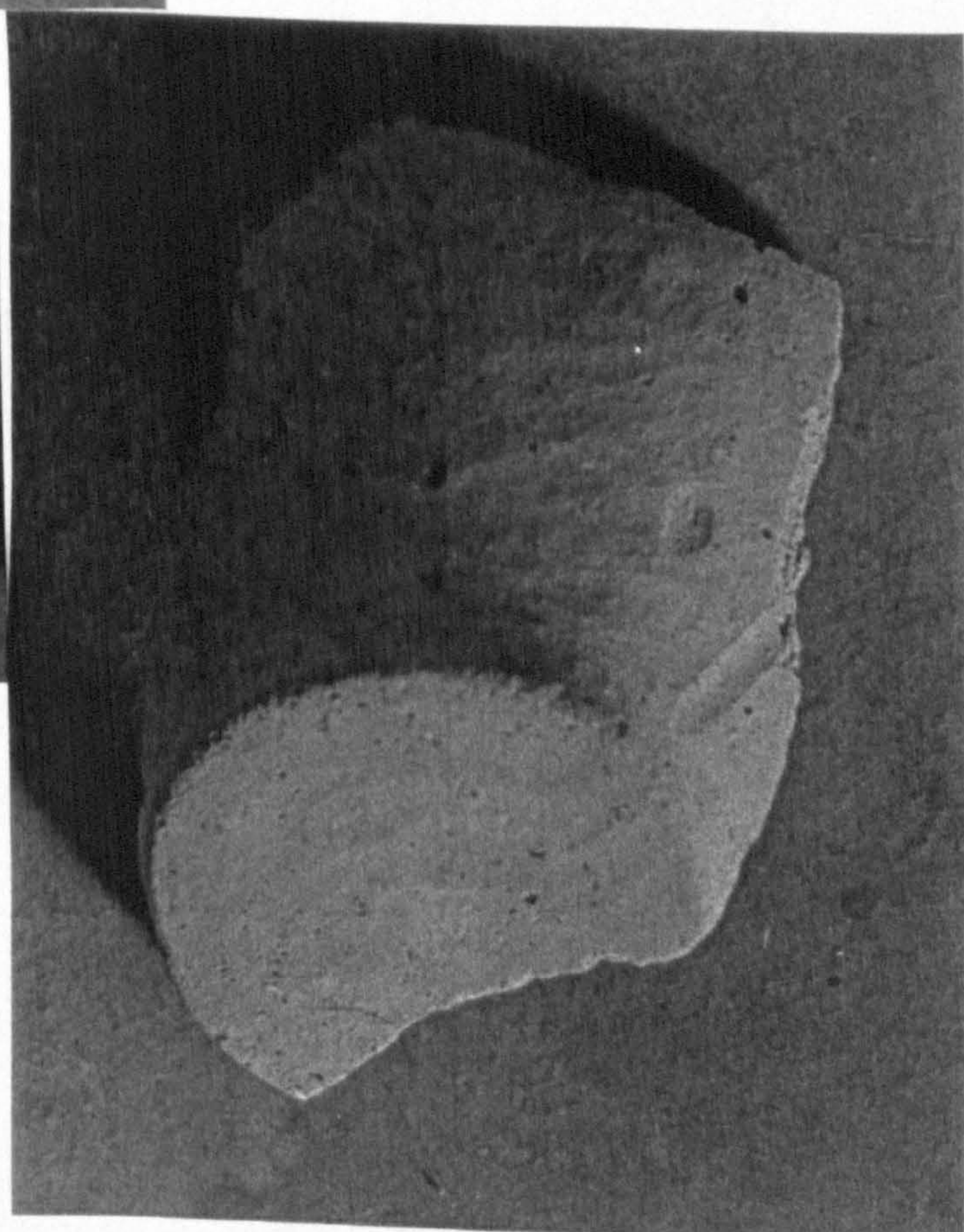
100



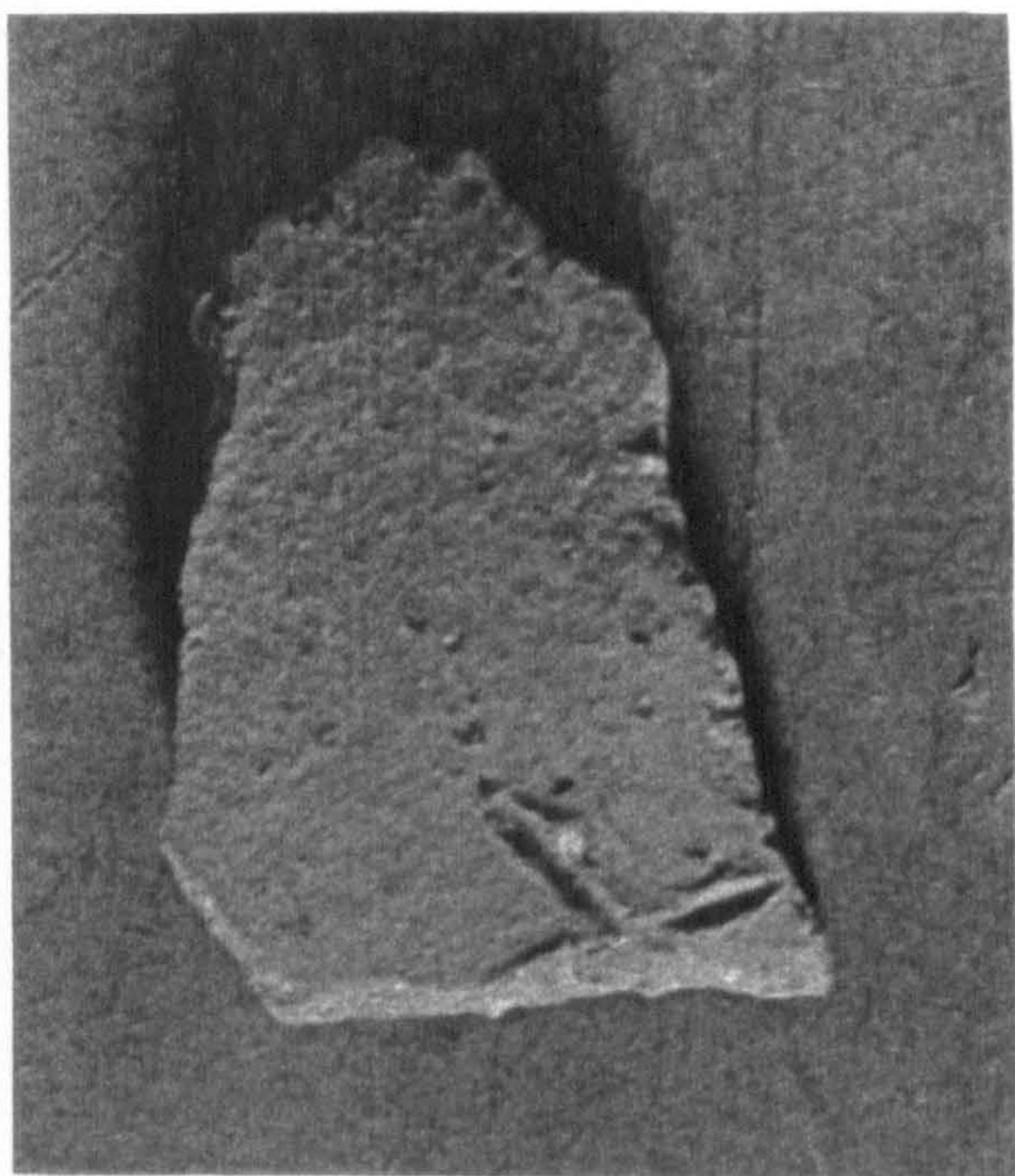
103



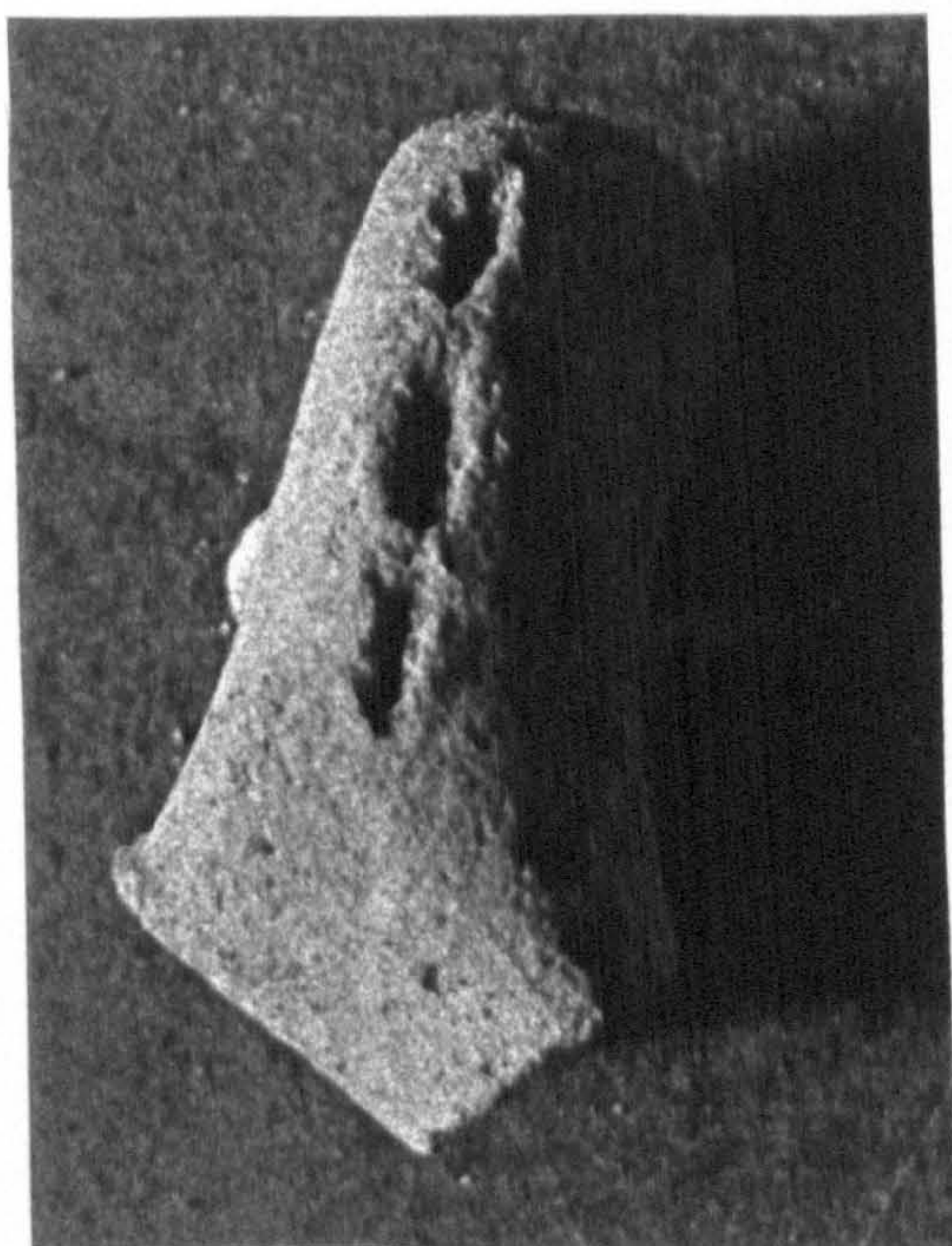
102



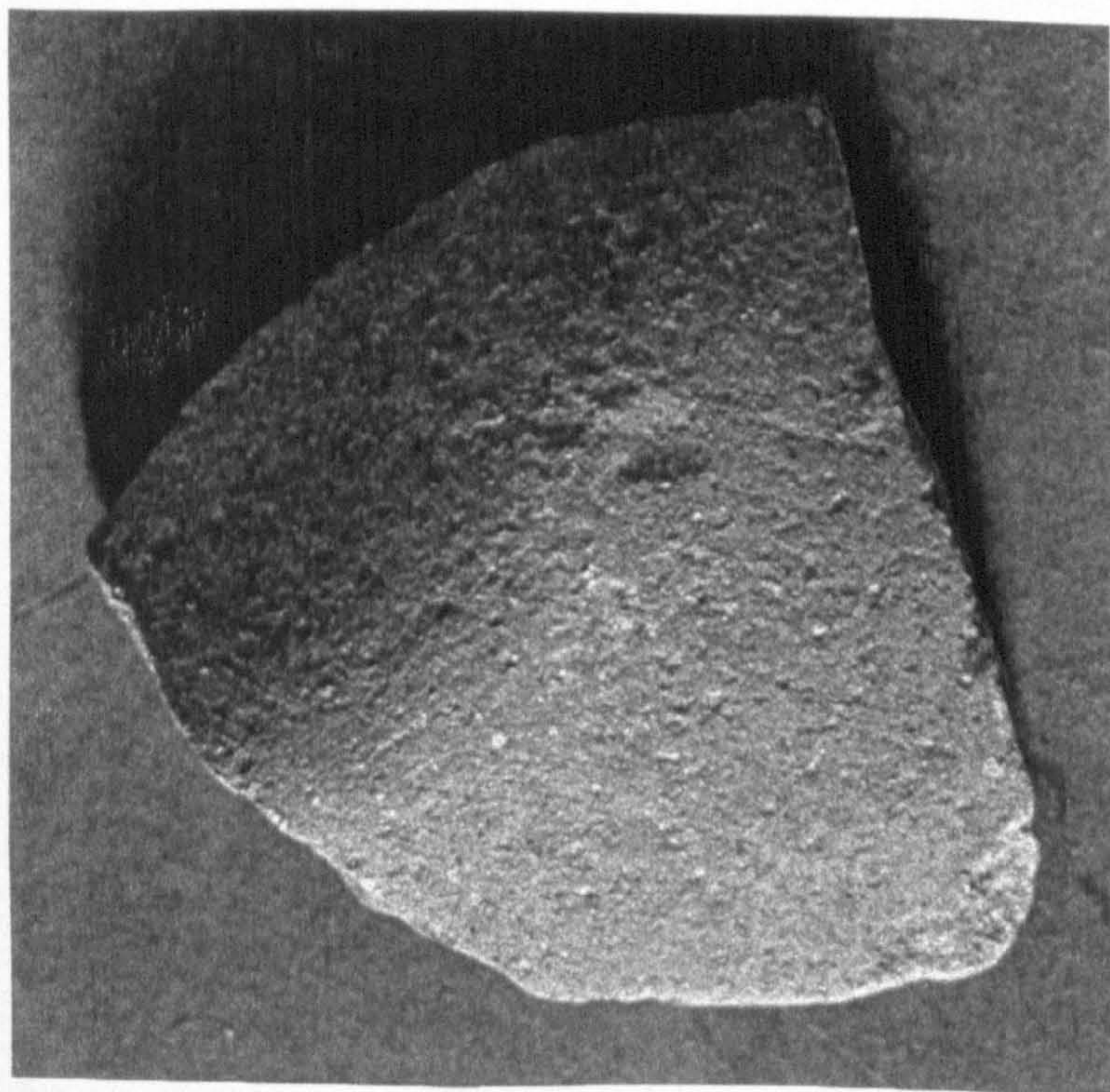
XXI. Phylakopi 1974-77 100-103. Various scales



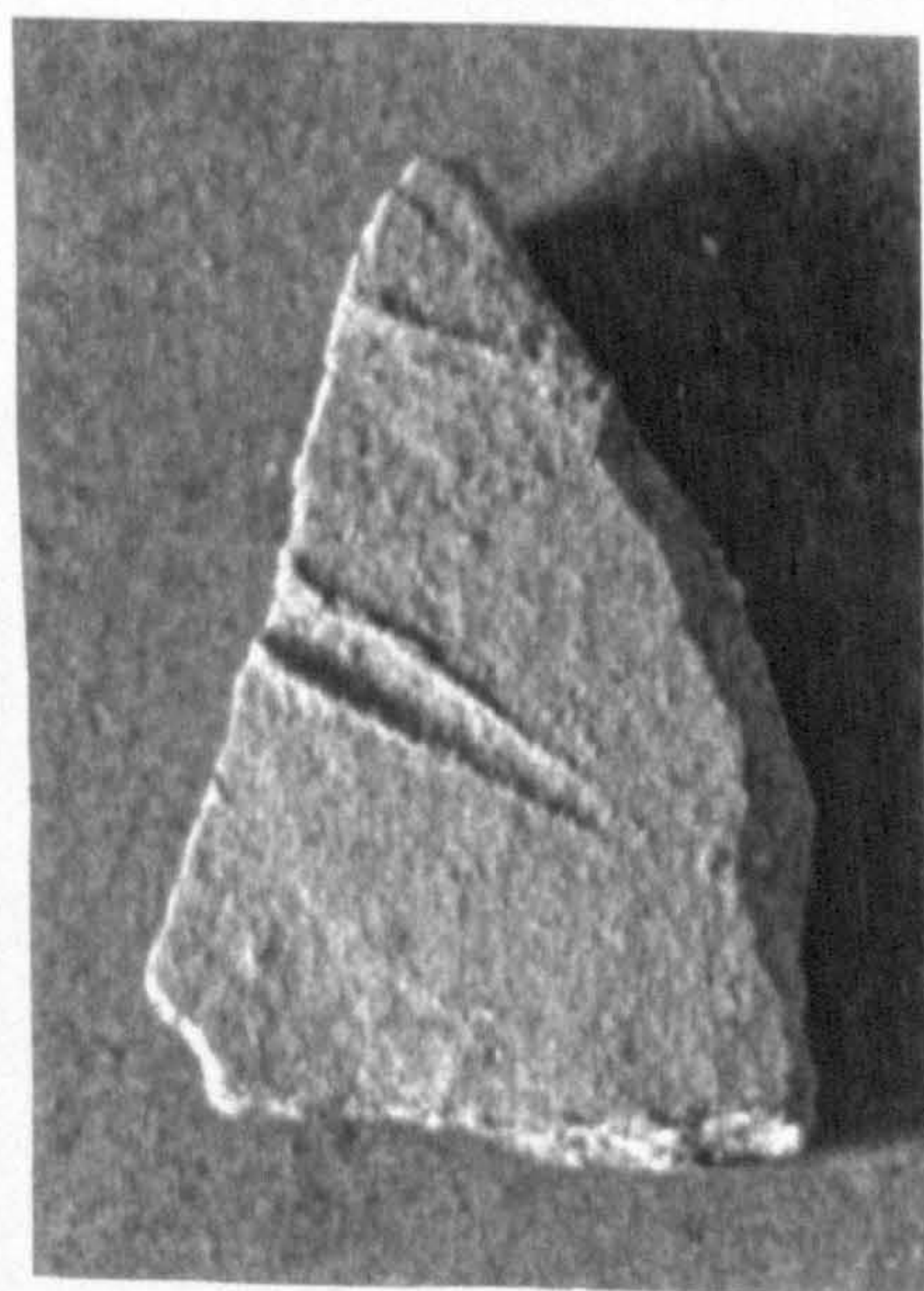
104



107

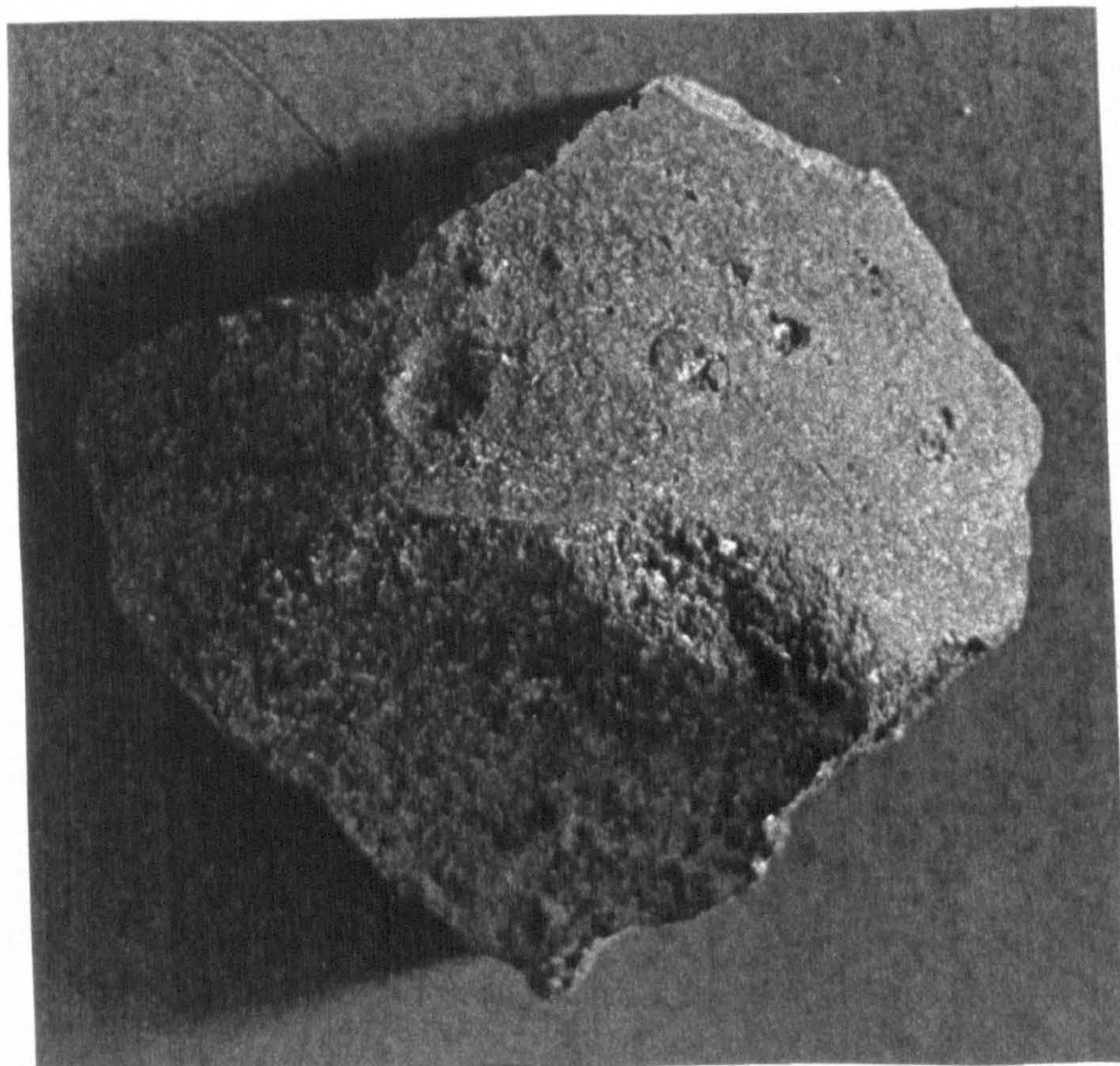


105

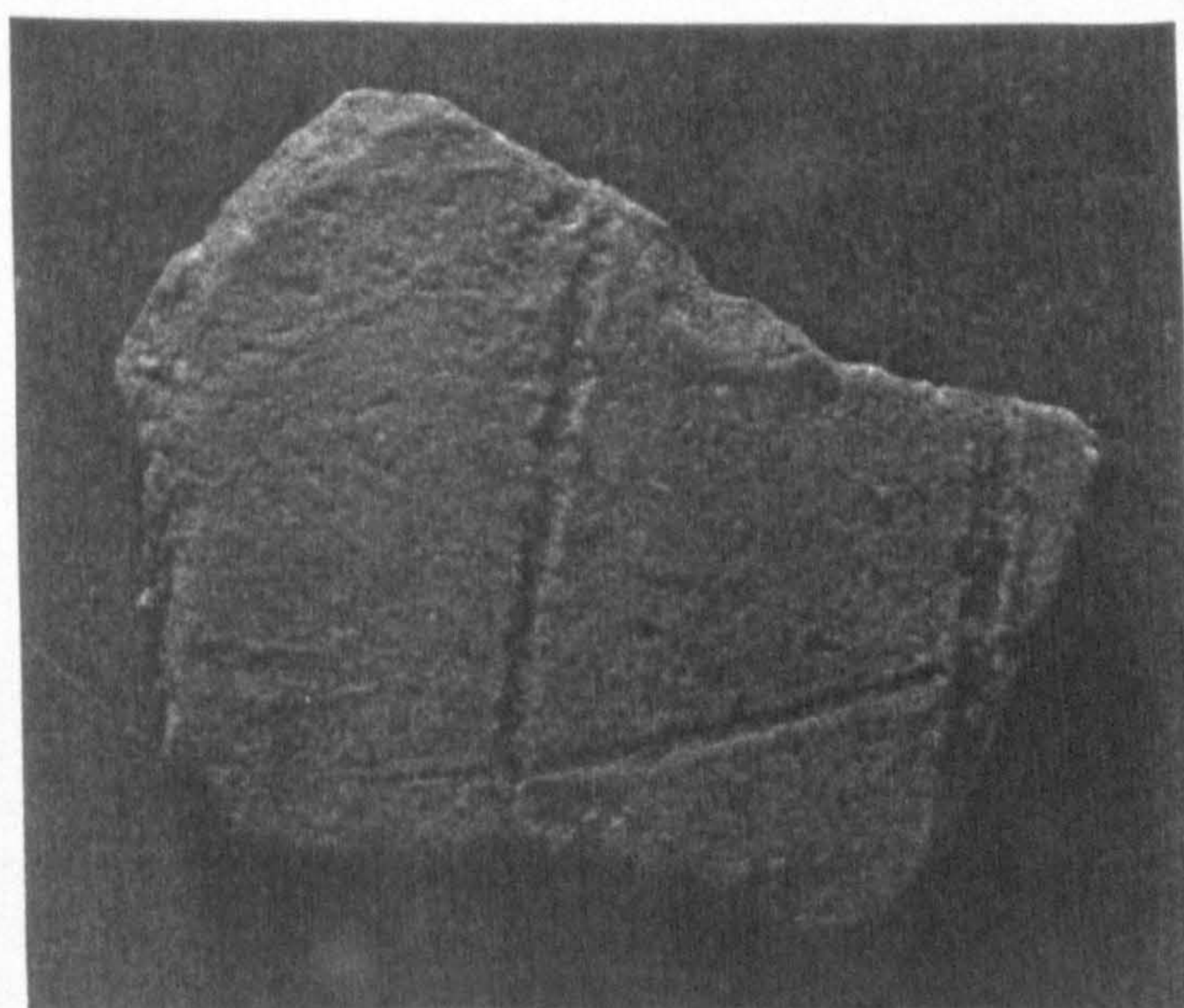


106

XXII. Phylakopi 1974-77 104-107. Various scales

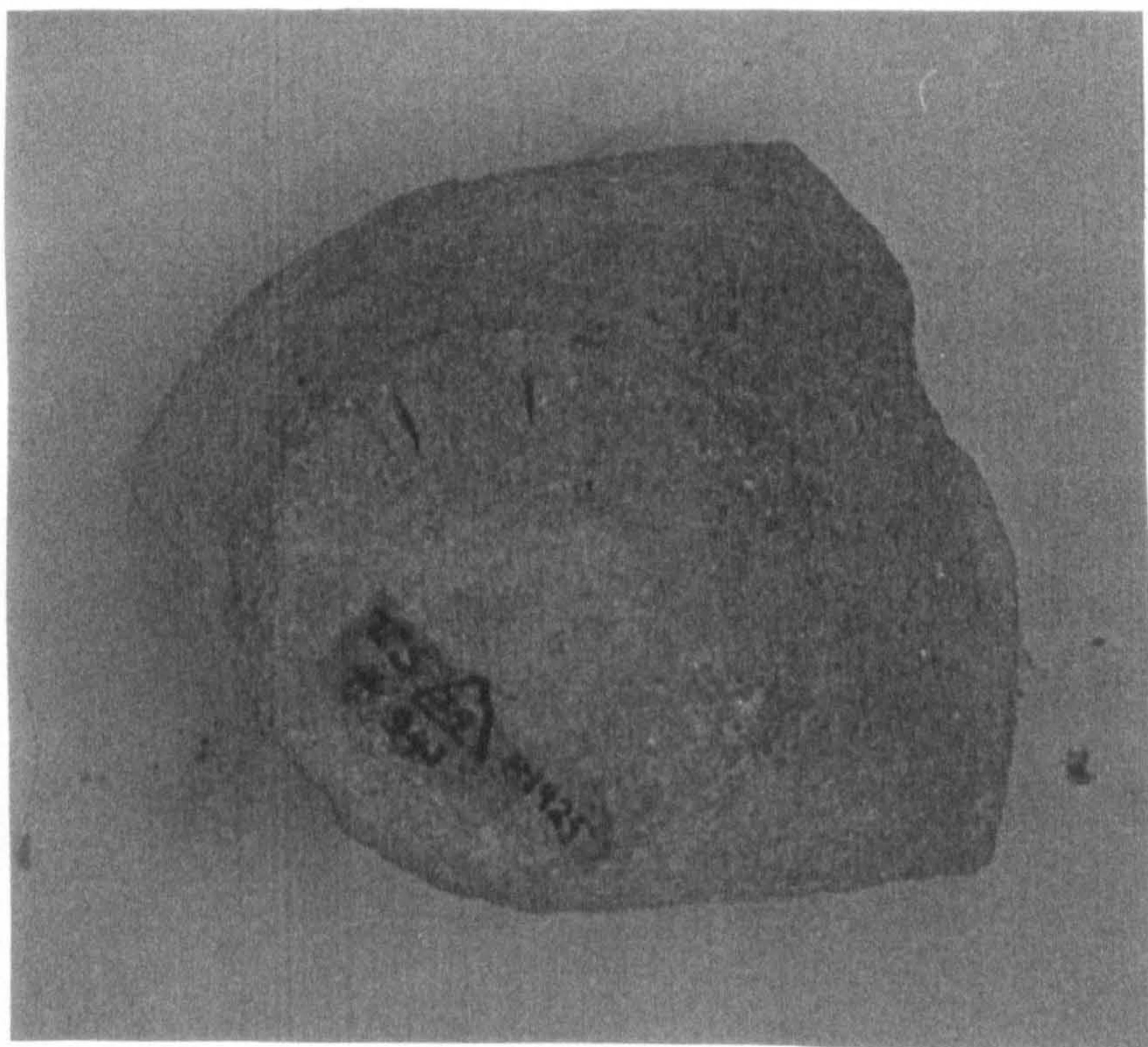


108

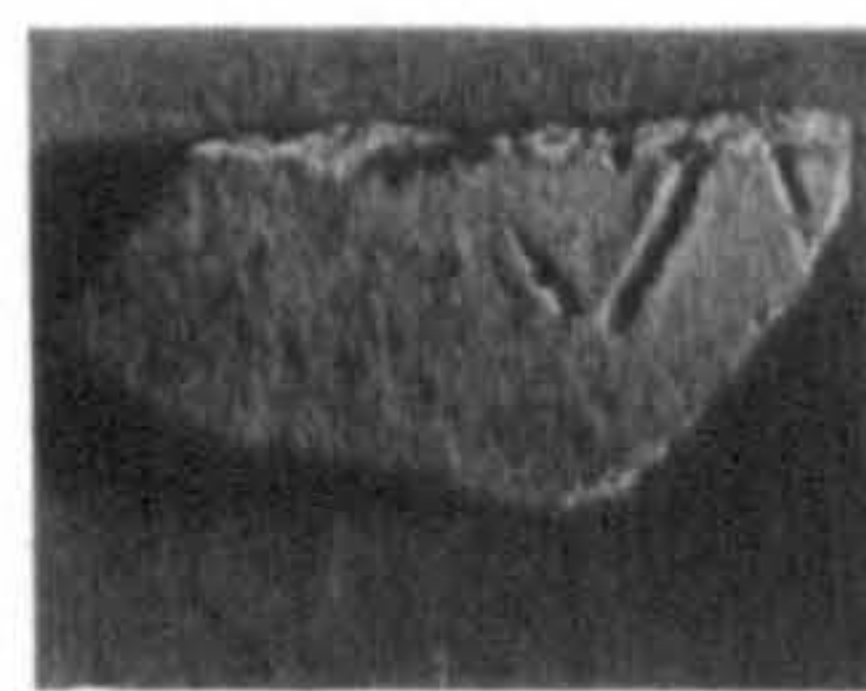


109

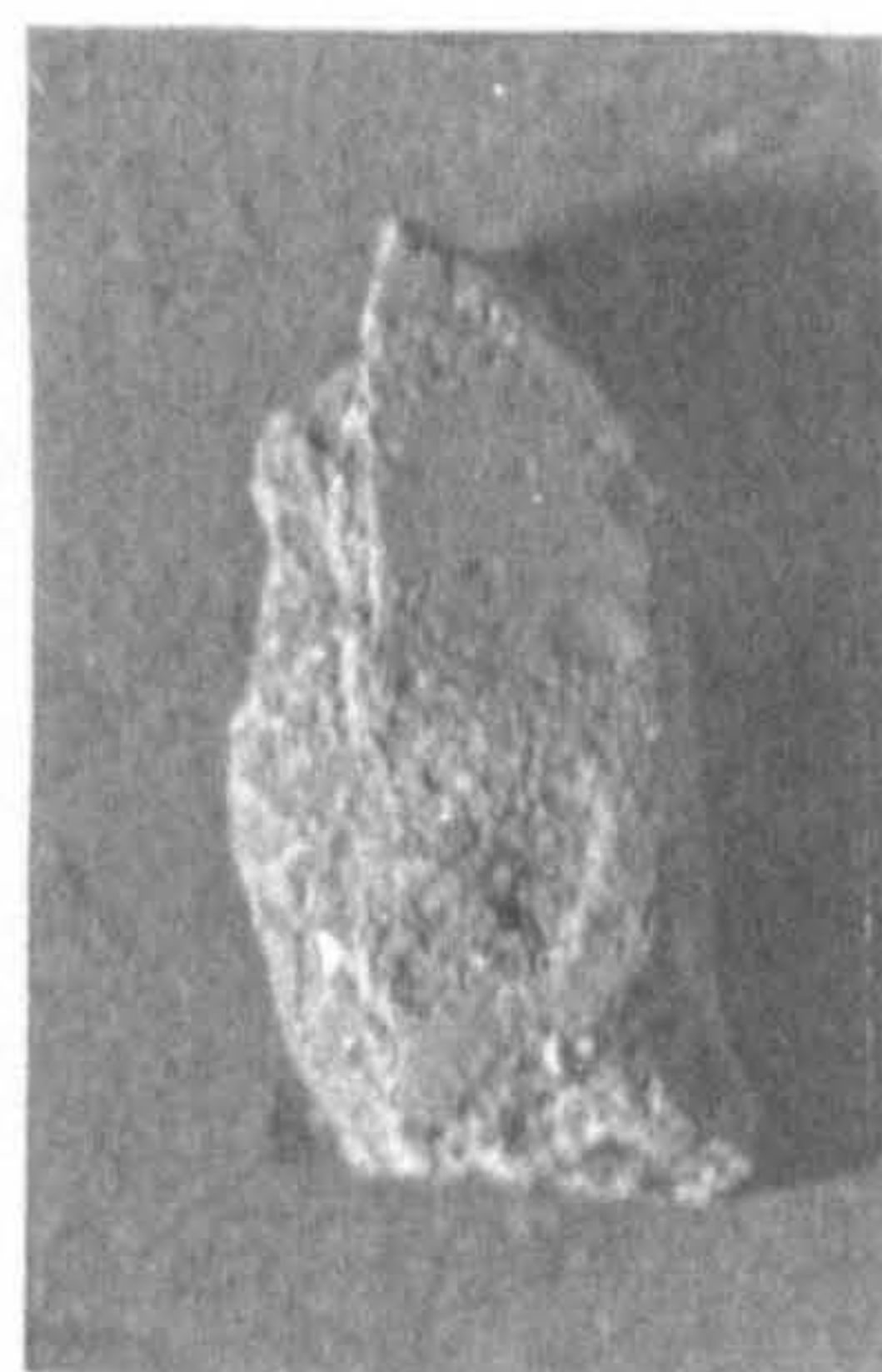
XXIII. Phylakopi 1974-77 108,109. Various scales



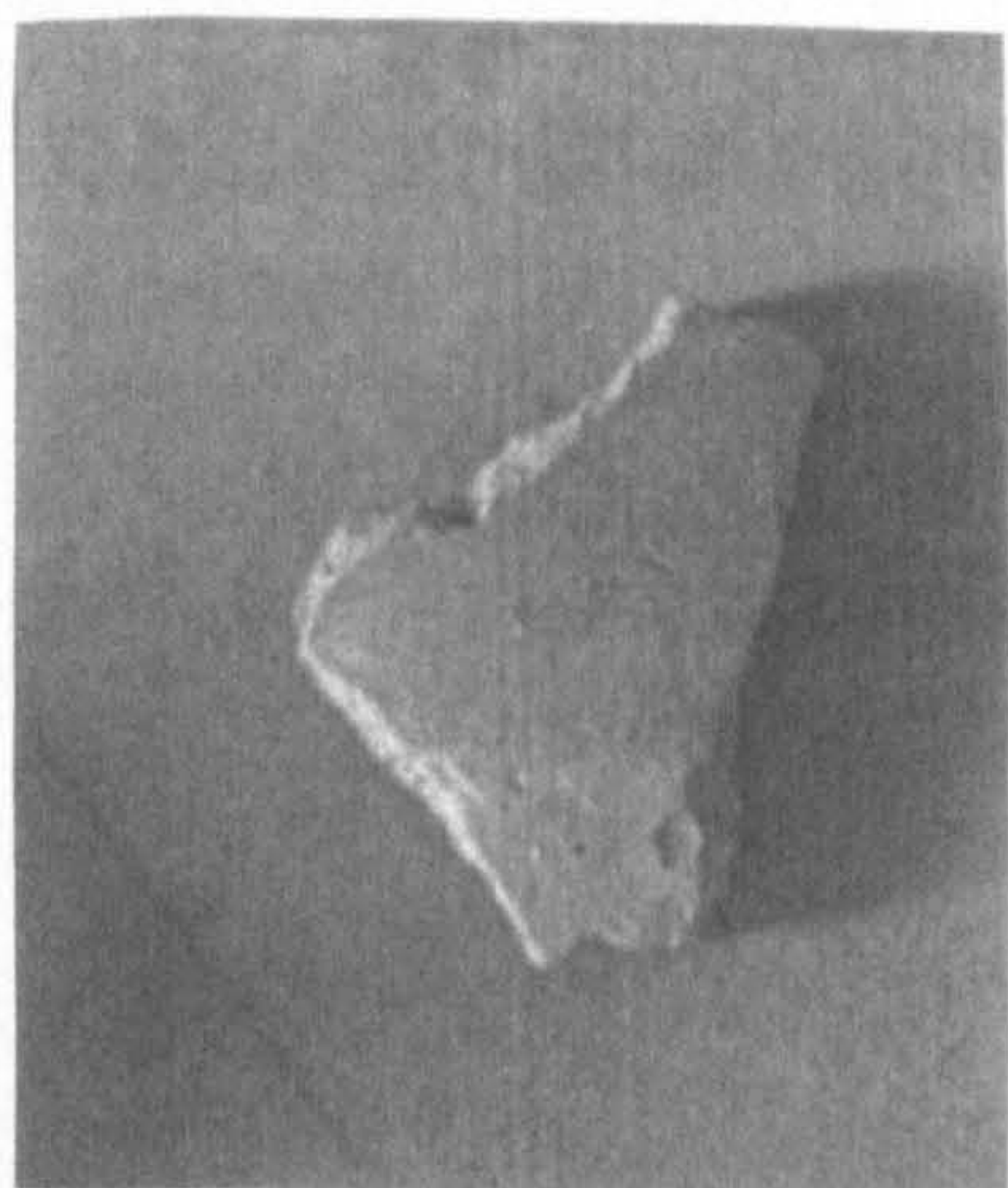
110



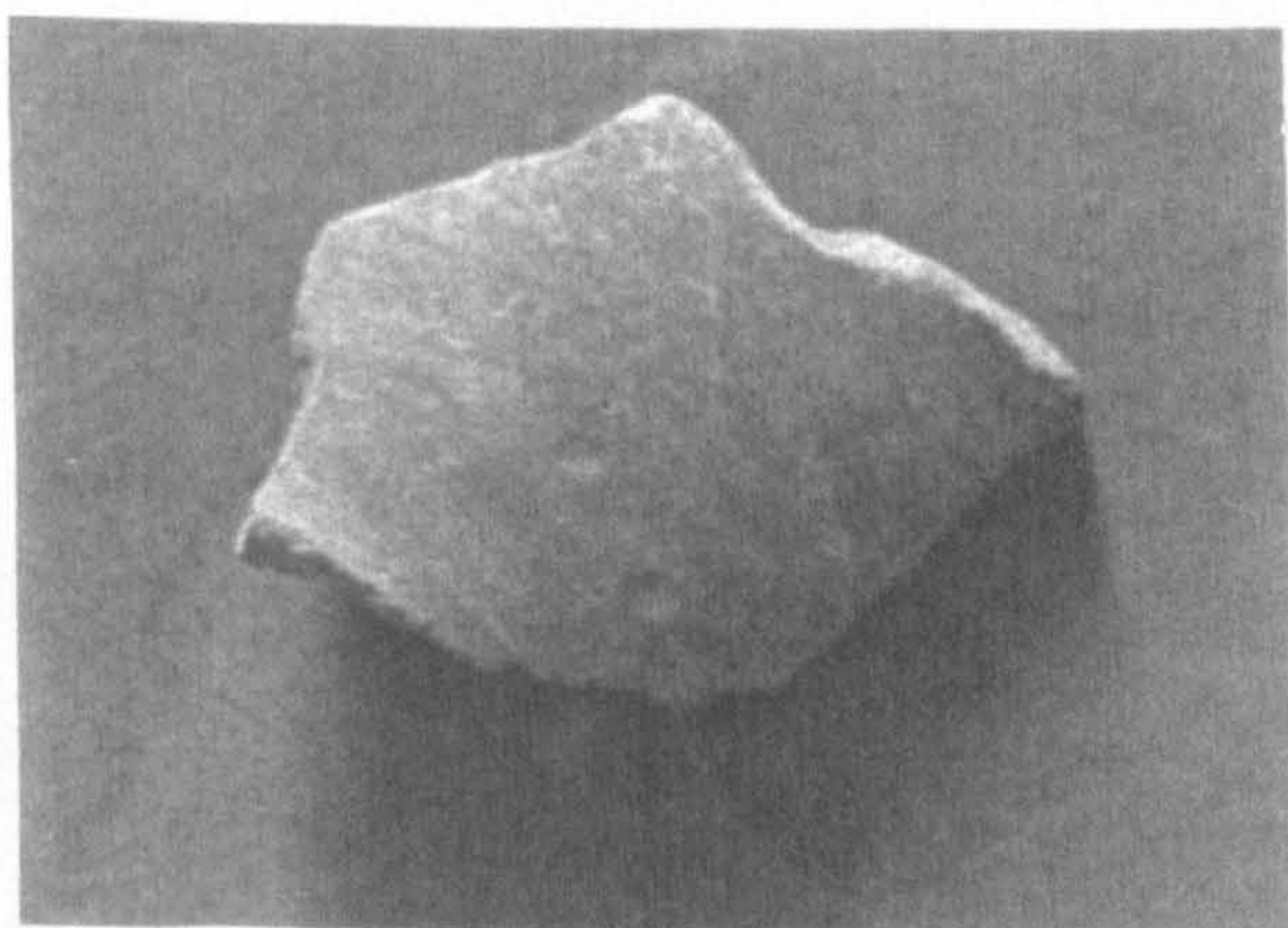
111



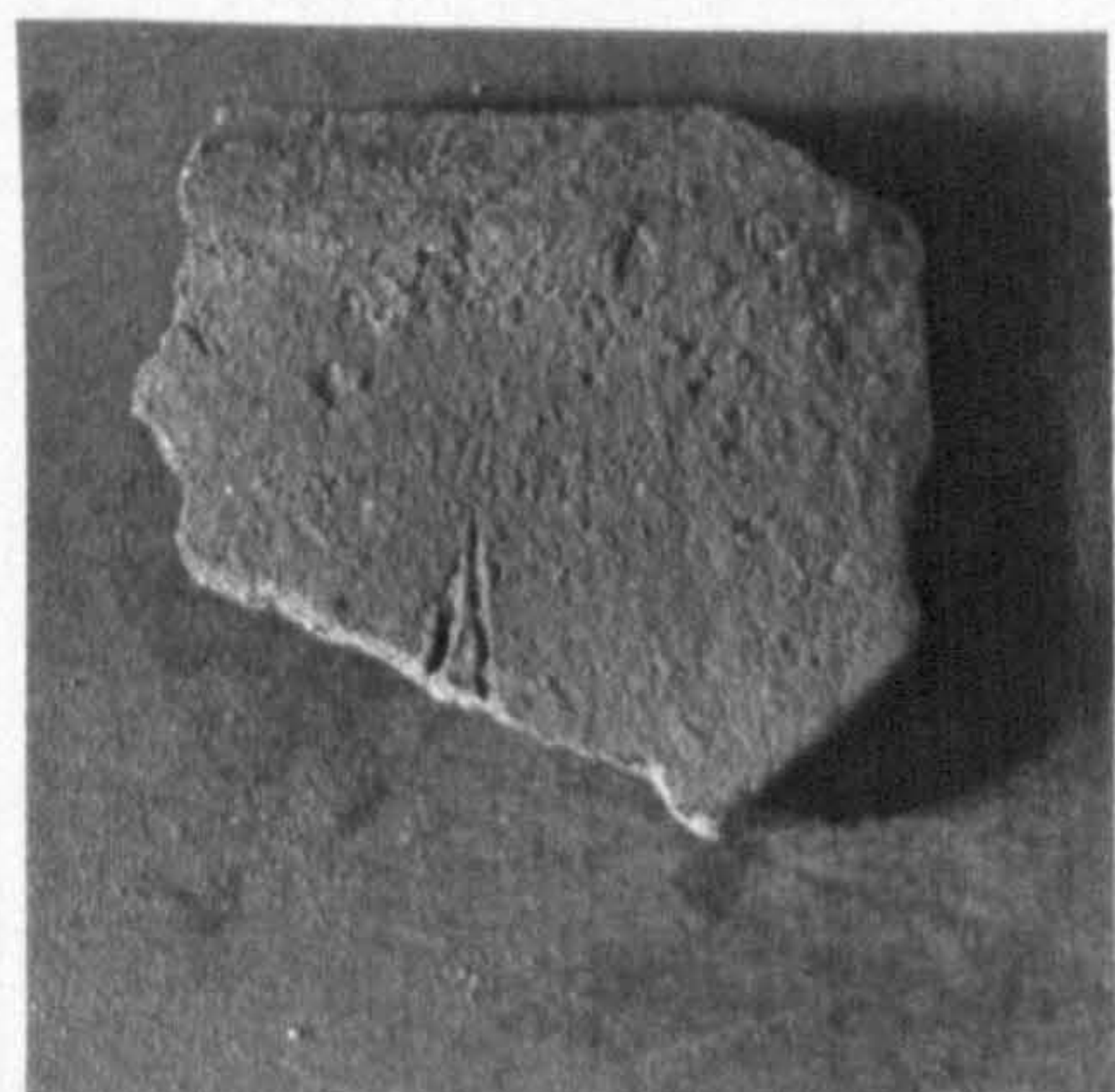
112



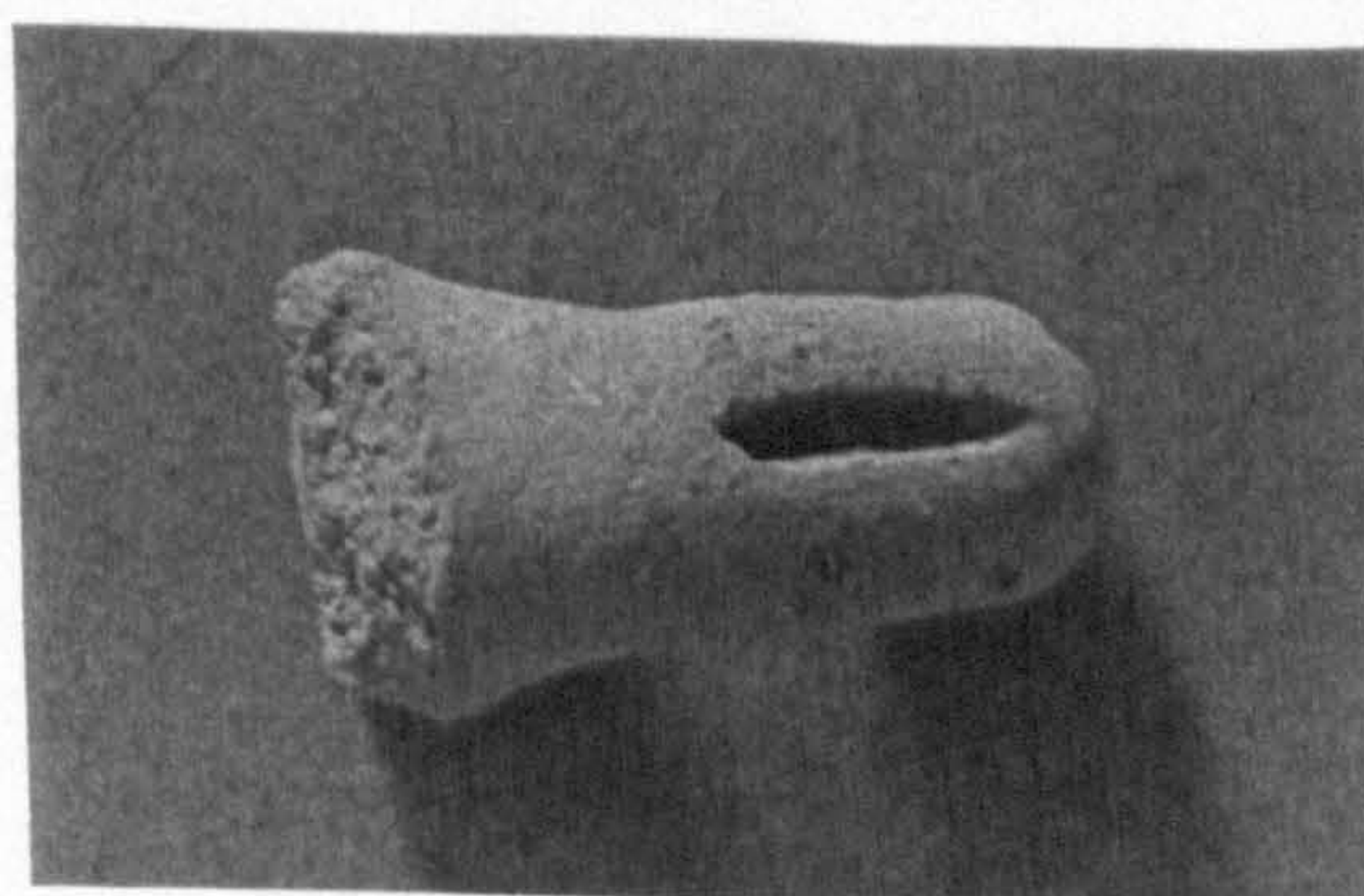
113



114

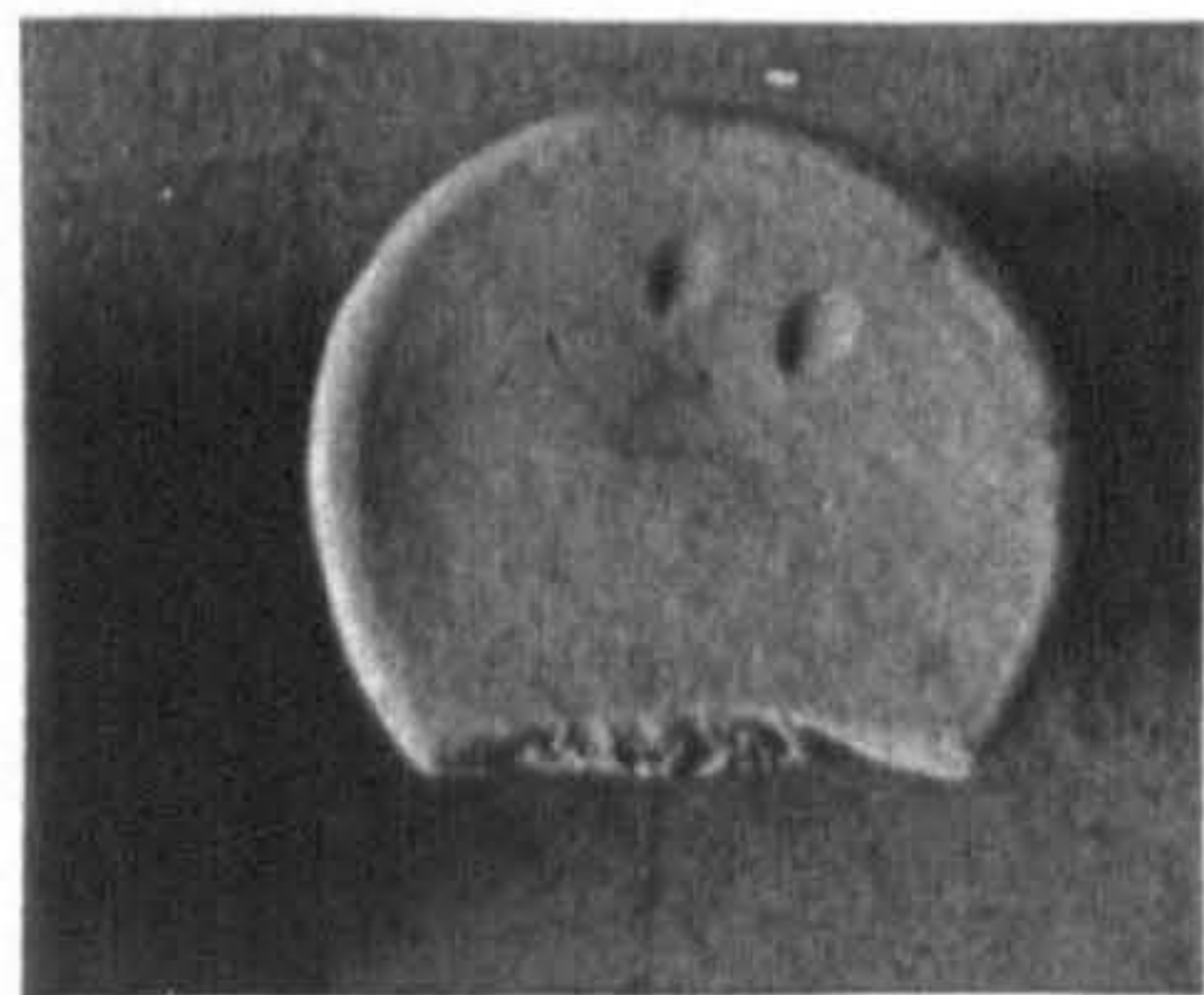


115

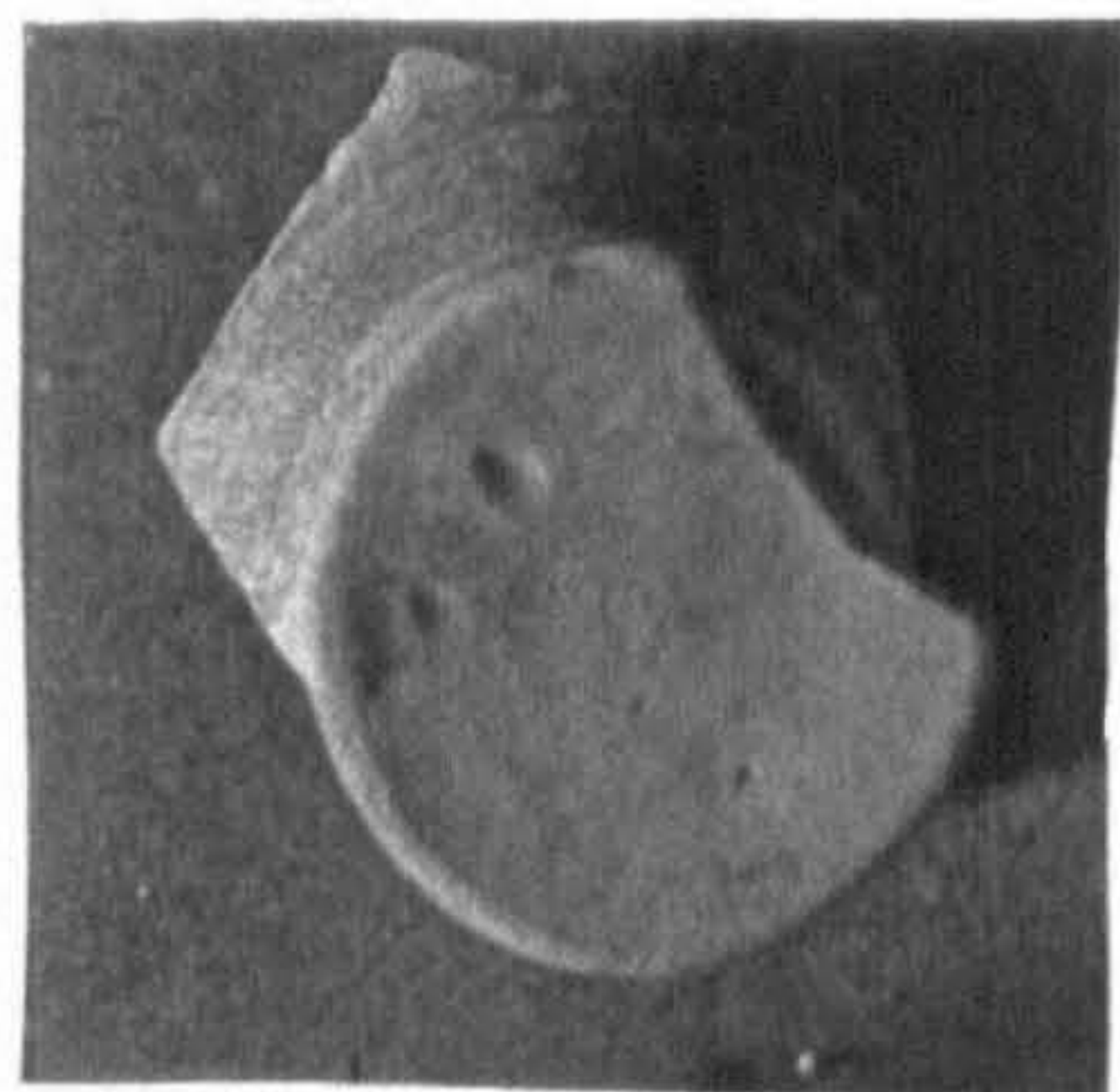


116

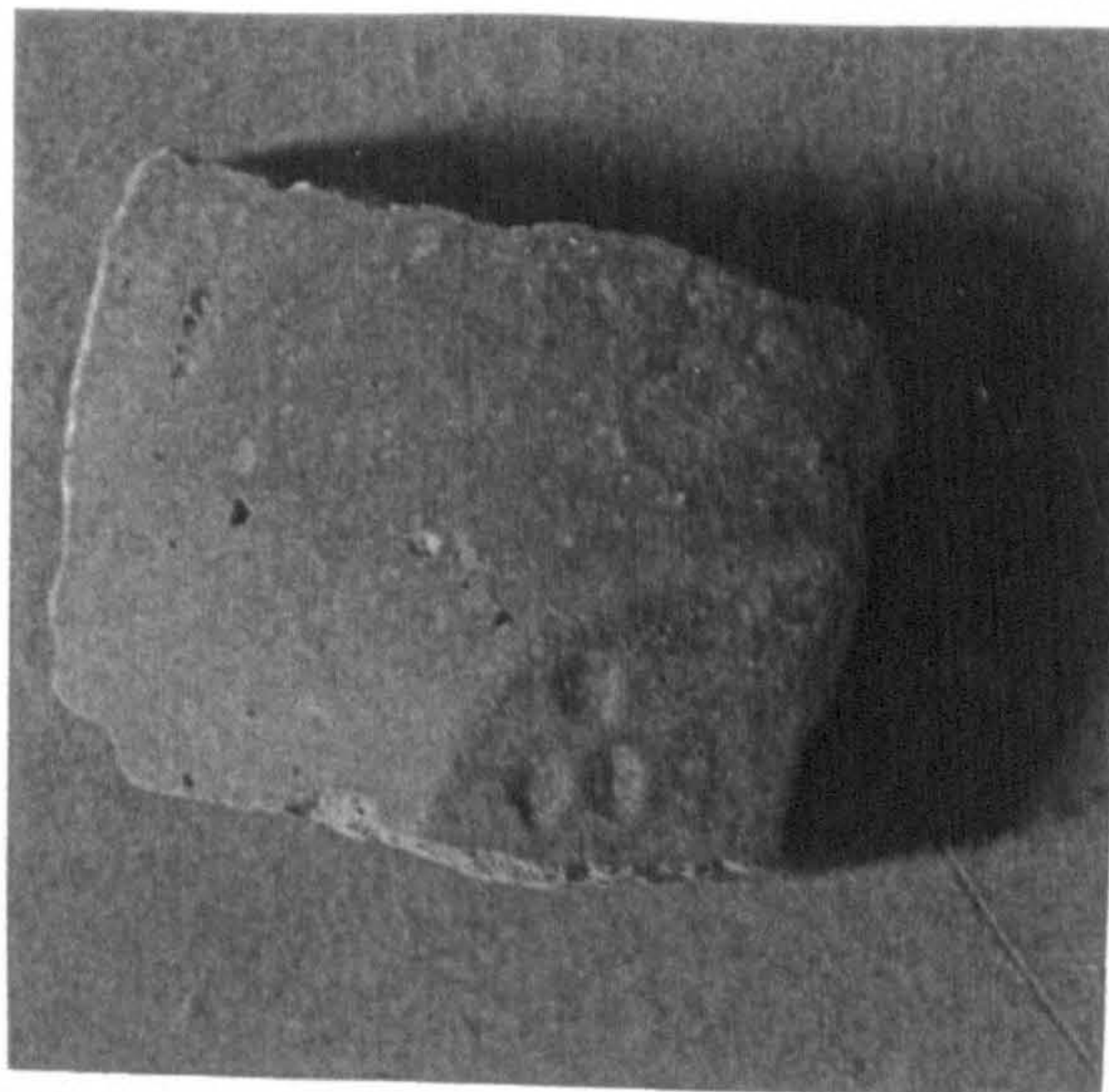
XXIV. Phylakopi 1974-77 110-116. Various scales



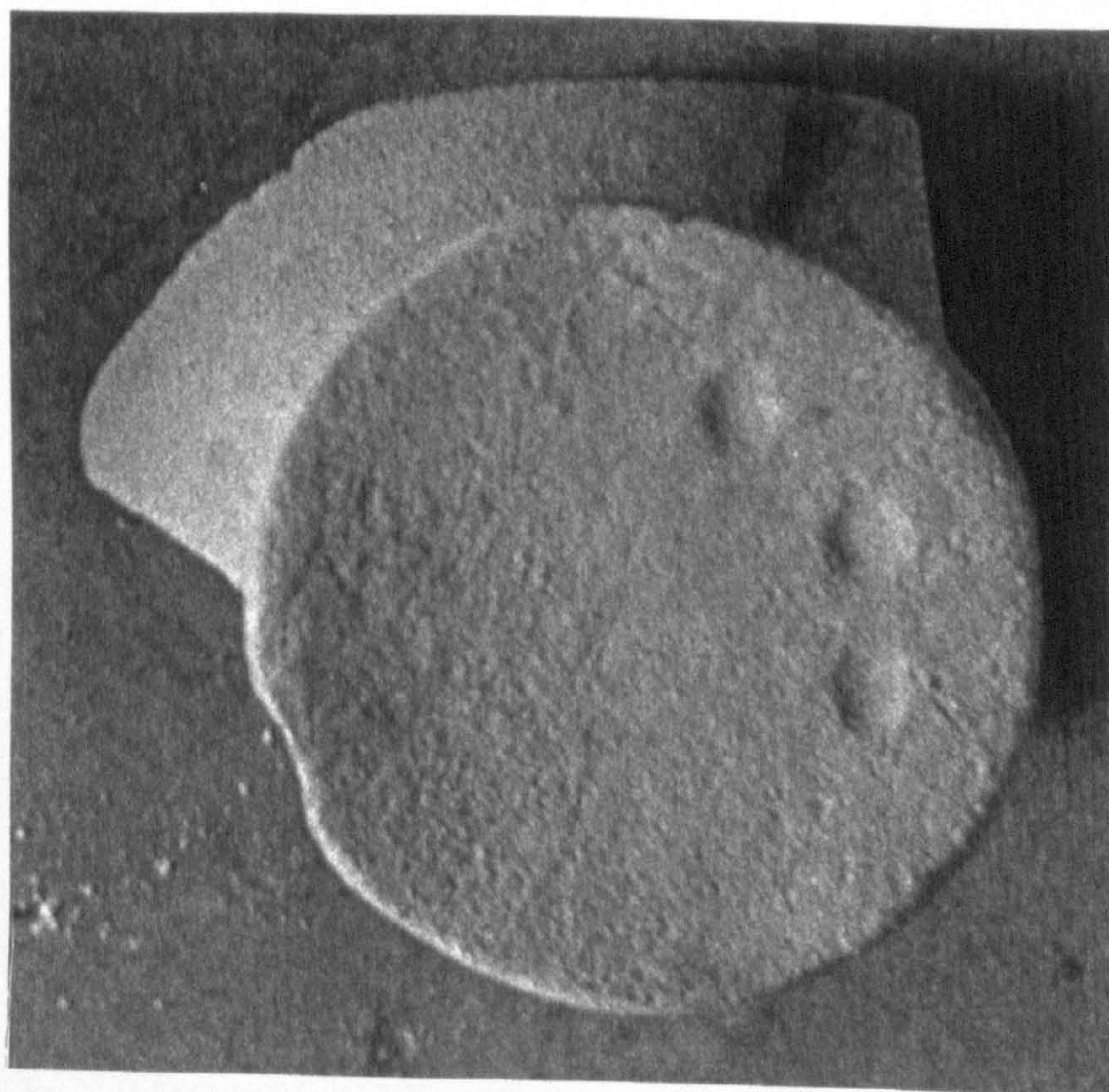
117



118

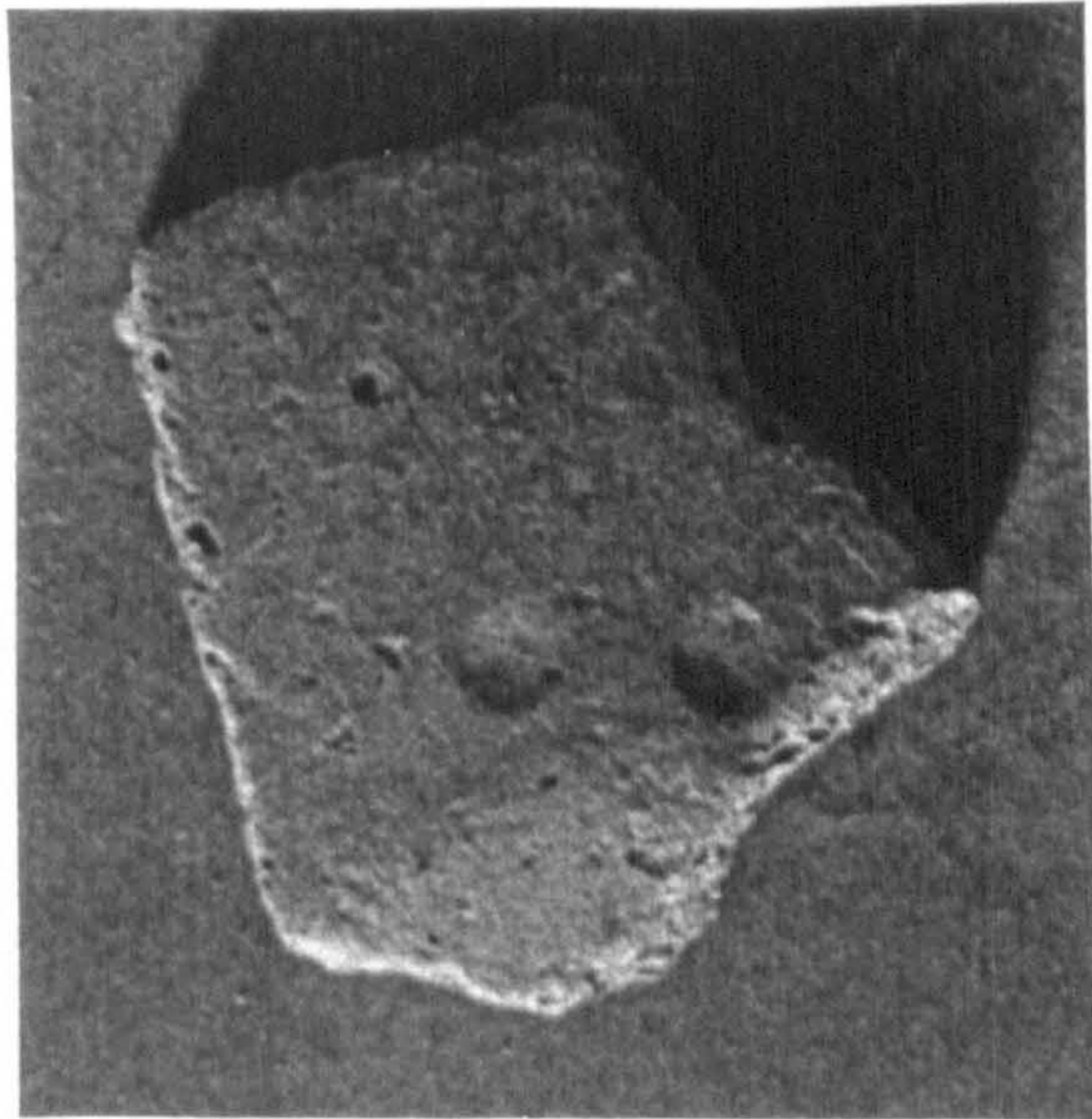


119

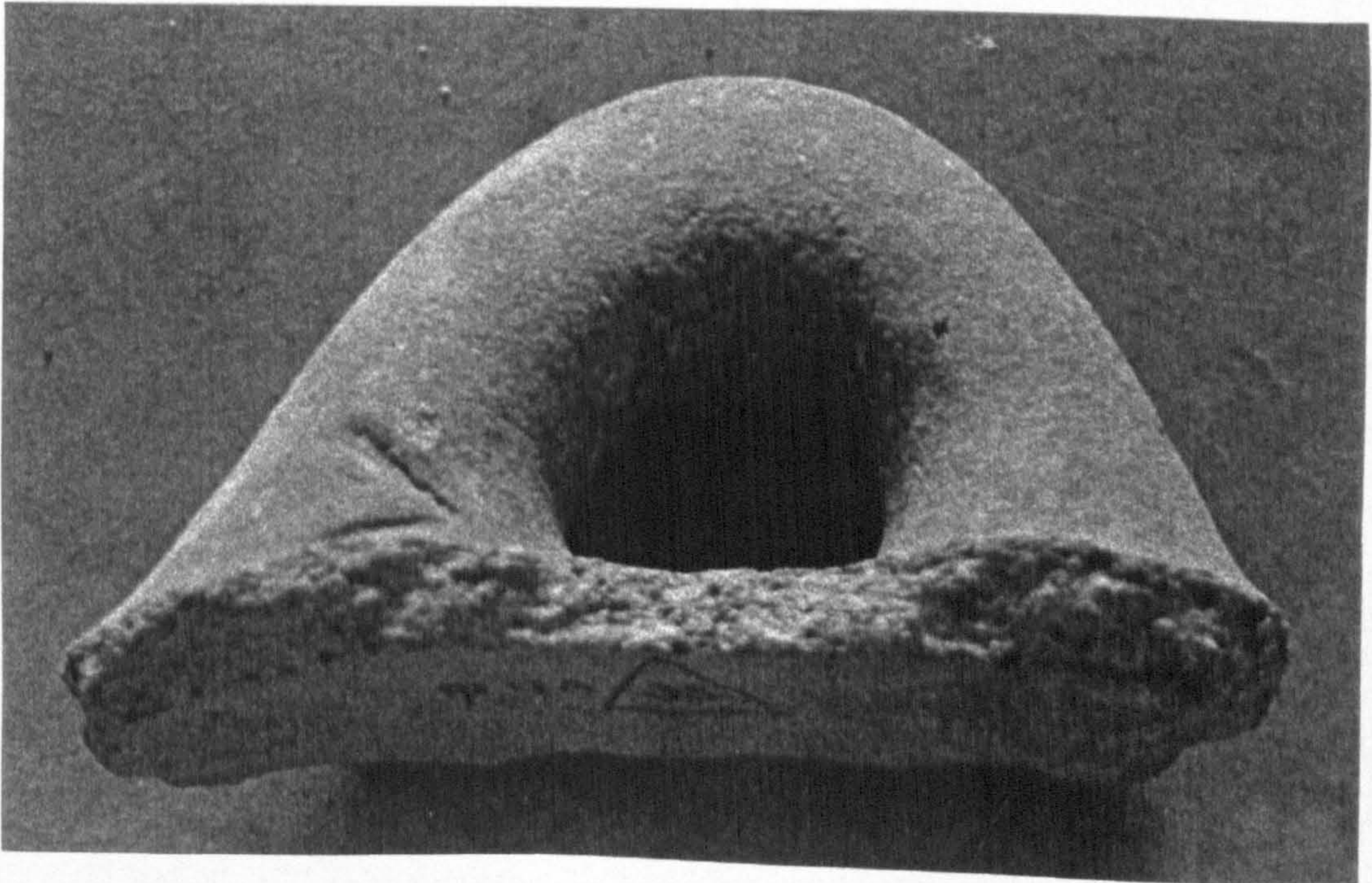


120

XXV. Phylakopi 1974-77 117-120. Various scales

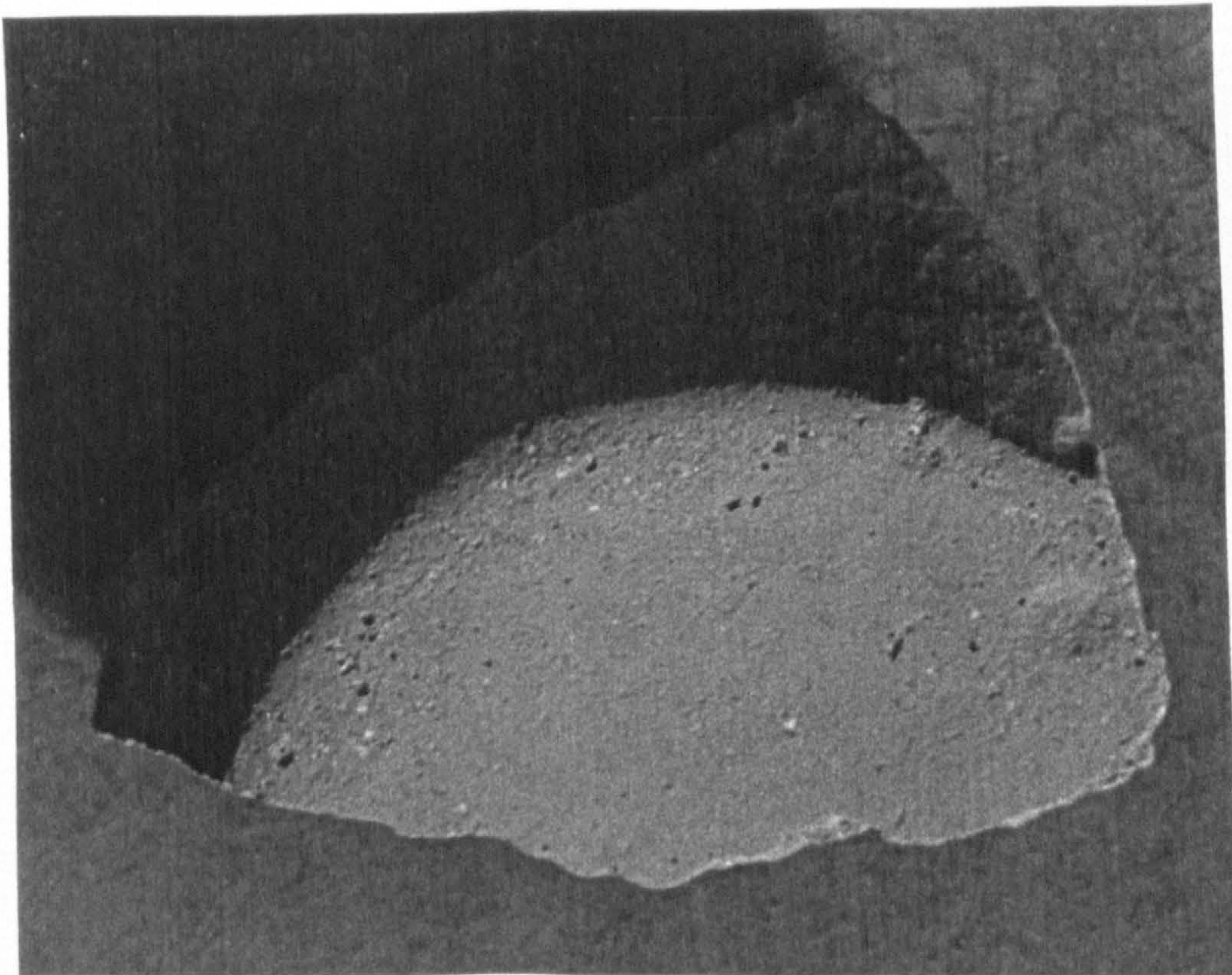


121



122

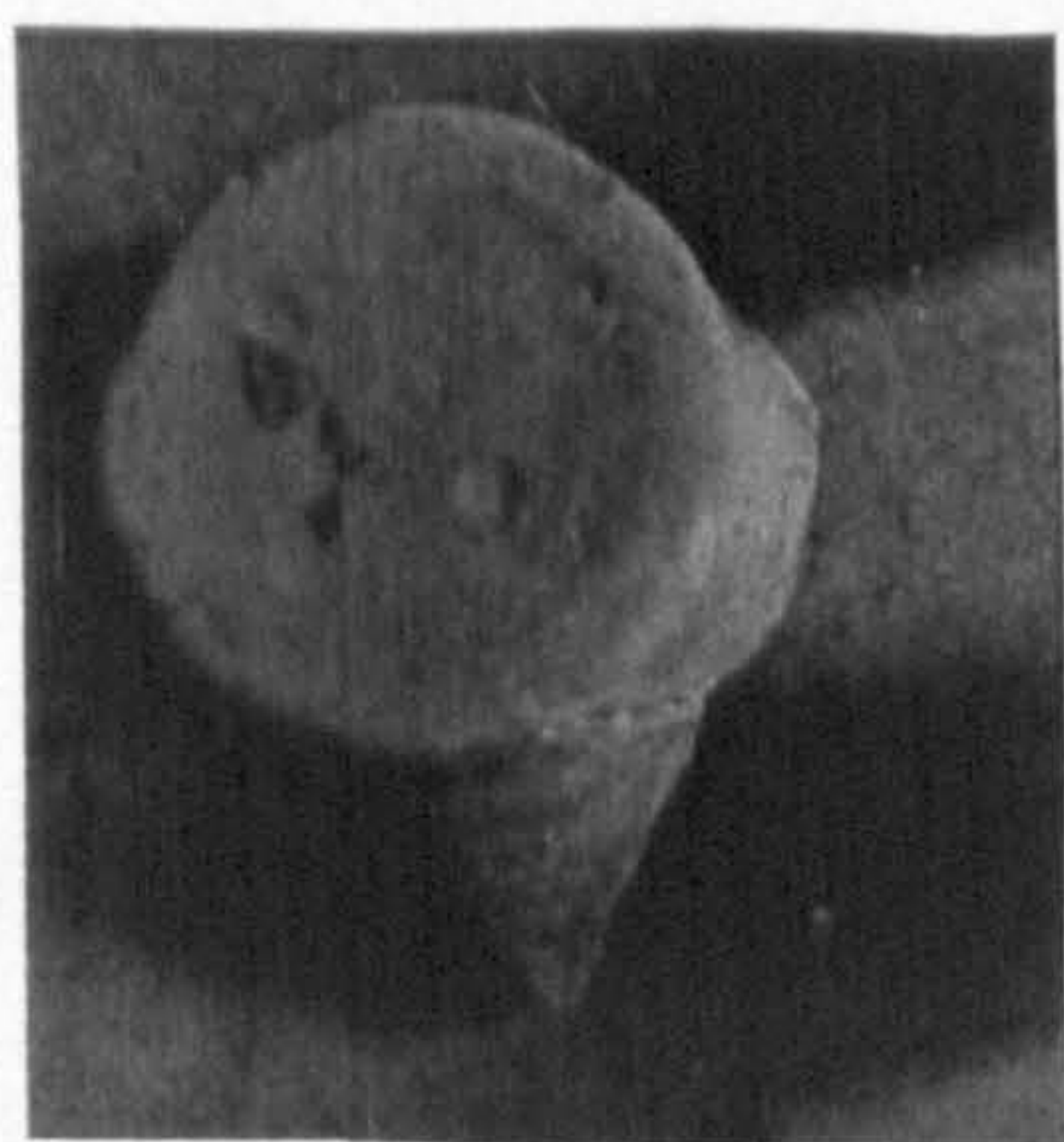
XXVI. Phylakopi 1974-77 121,122. Various scales



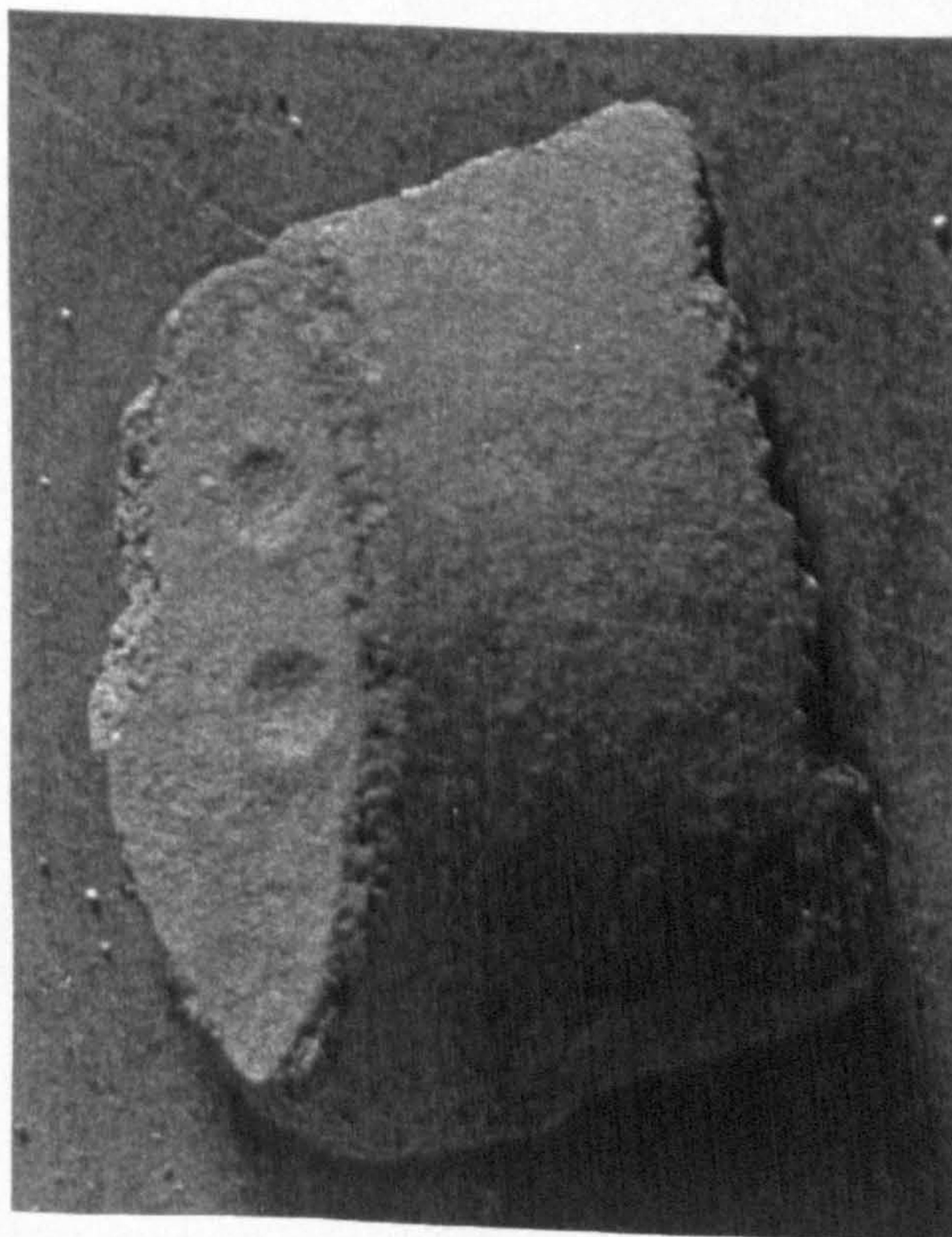
123



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125

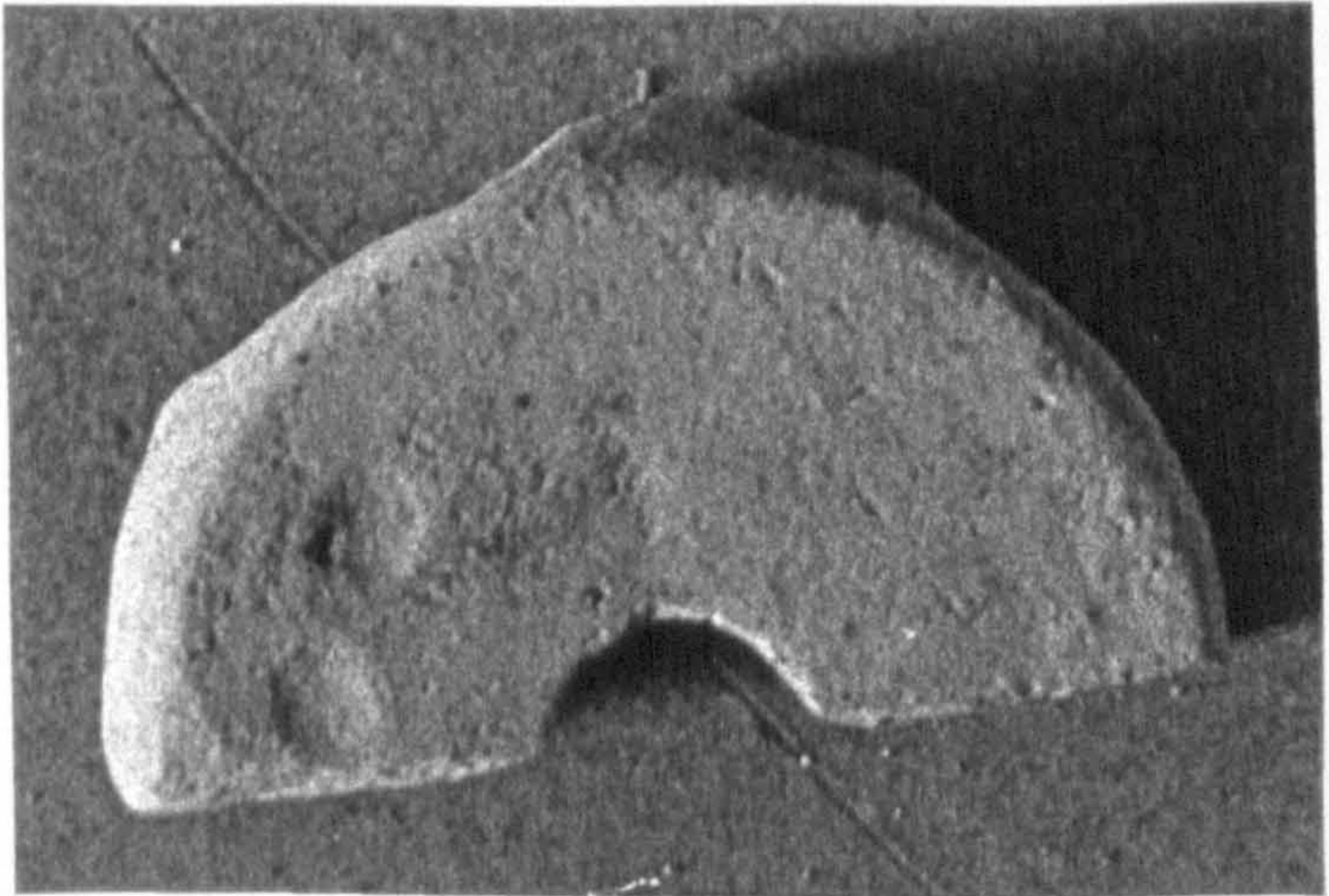


126

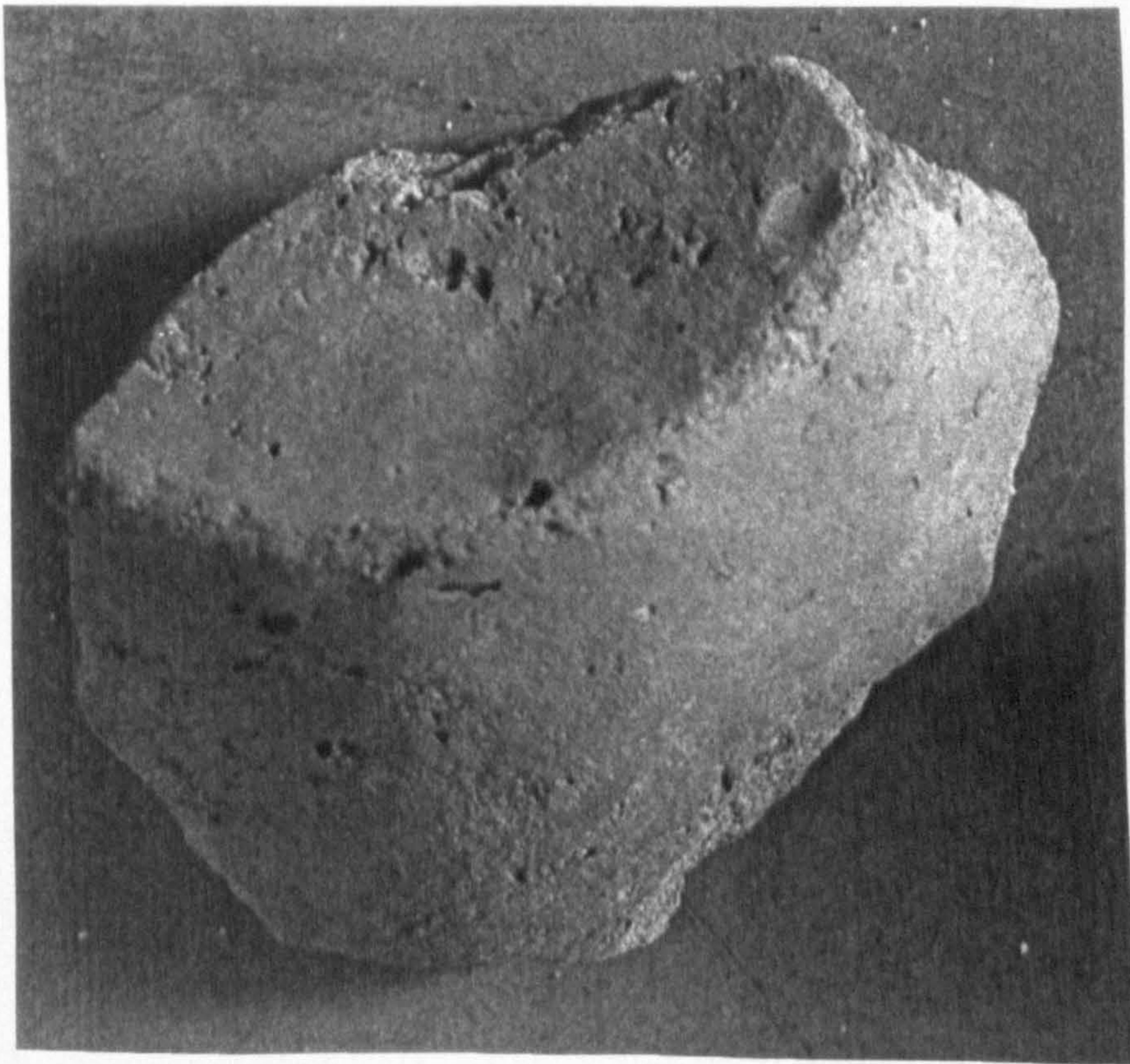
XXVII. Phylakopi 1974-77 123-126. Various scales



127

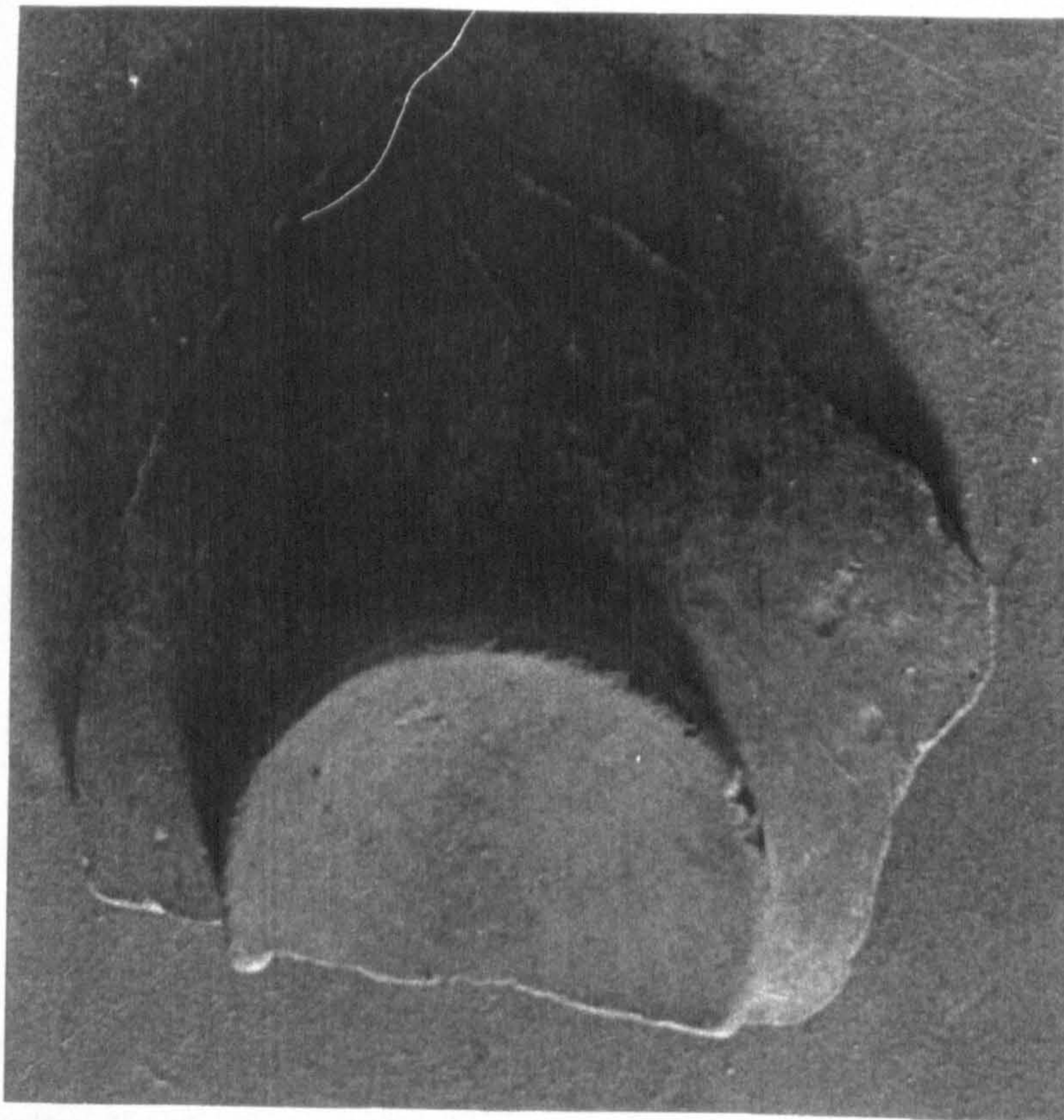


129



128

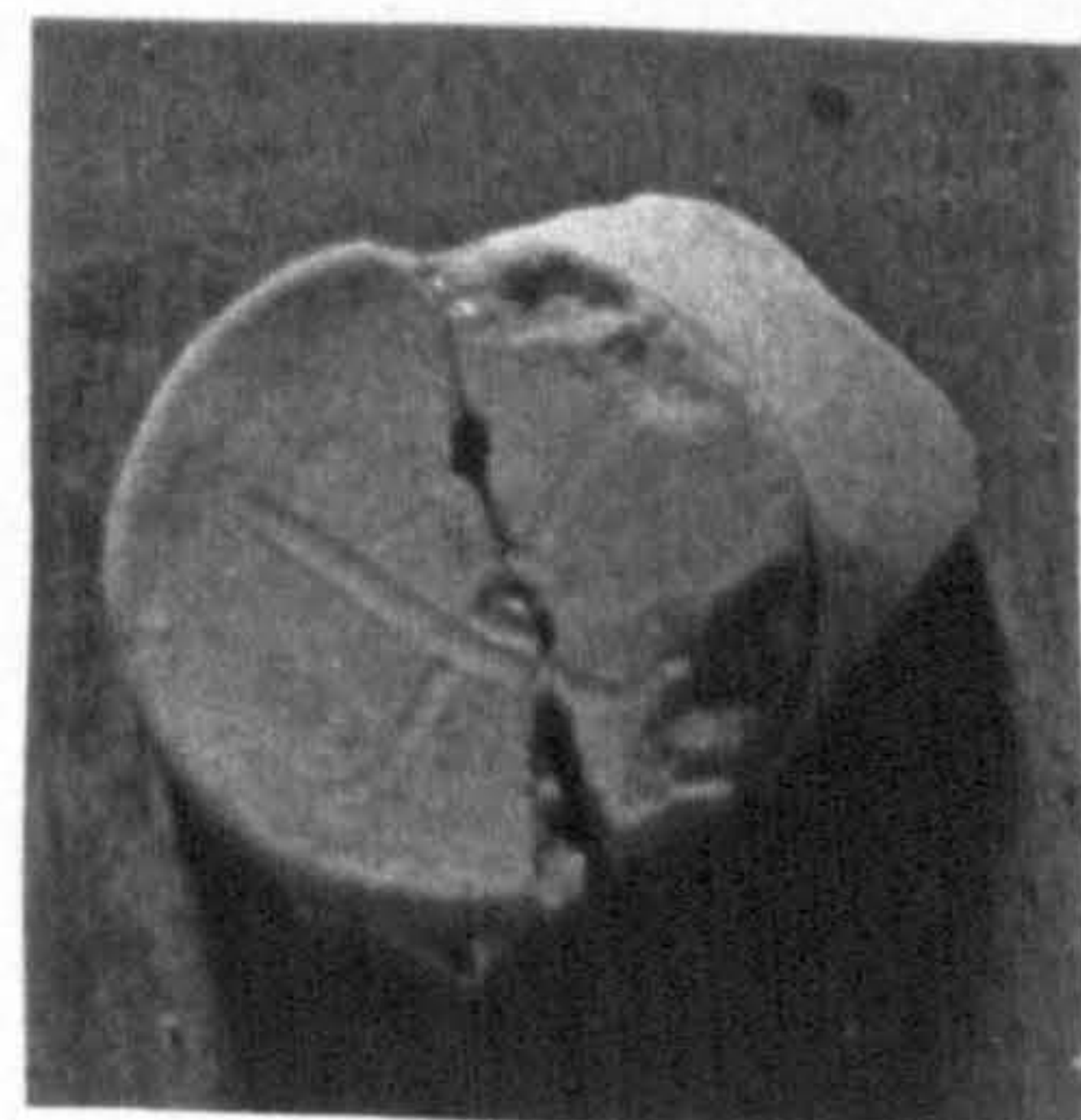
XXVIII. Phylakopi 1974-77 127-129. Various scales



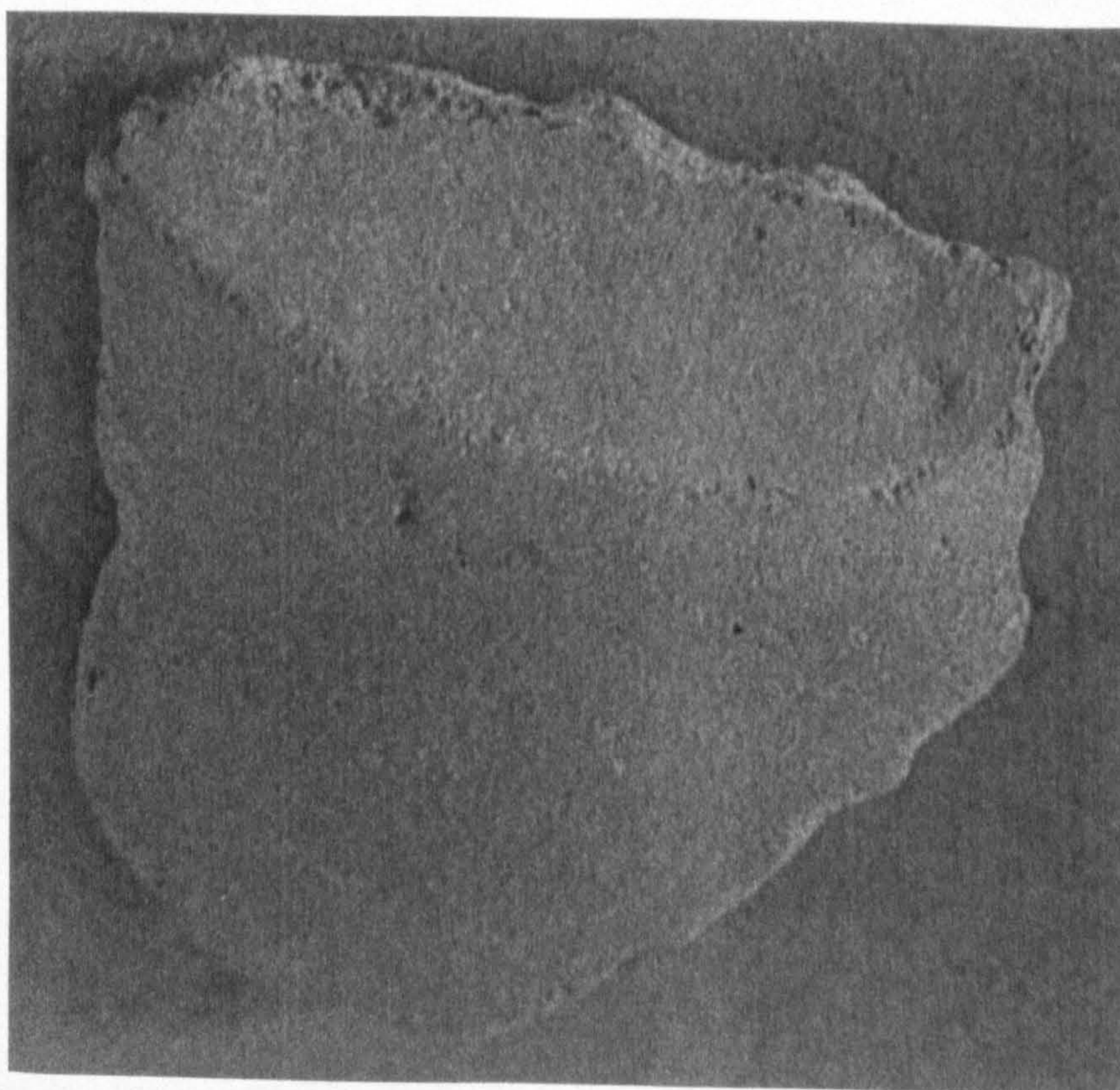
130



131



133

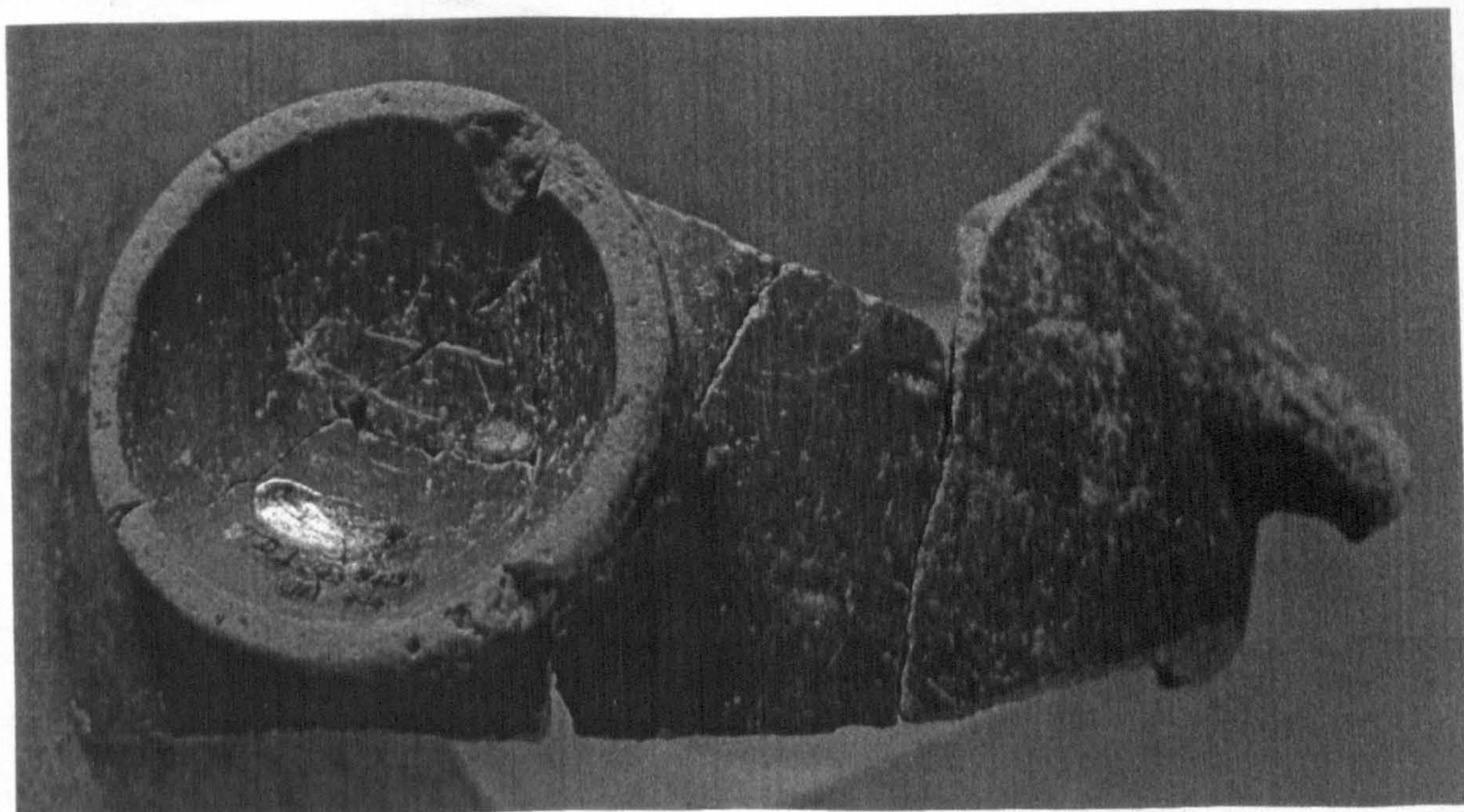


132

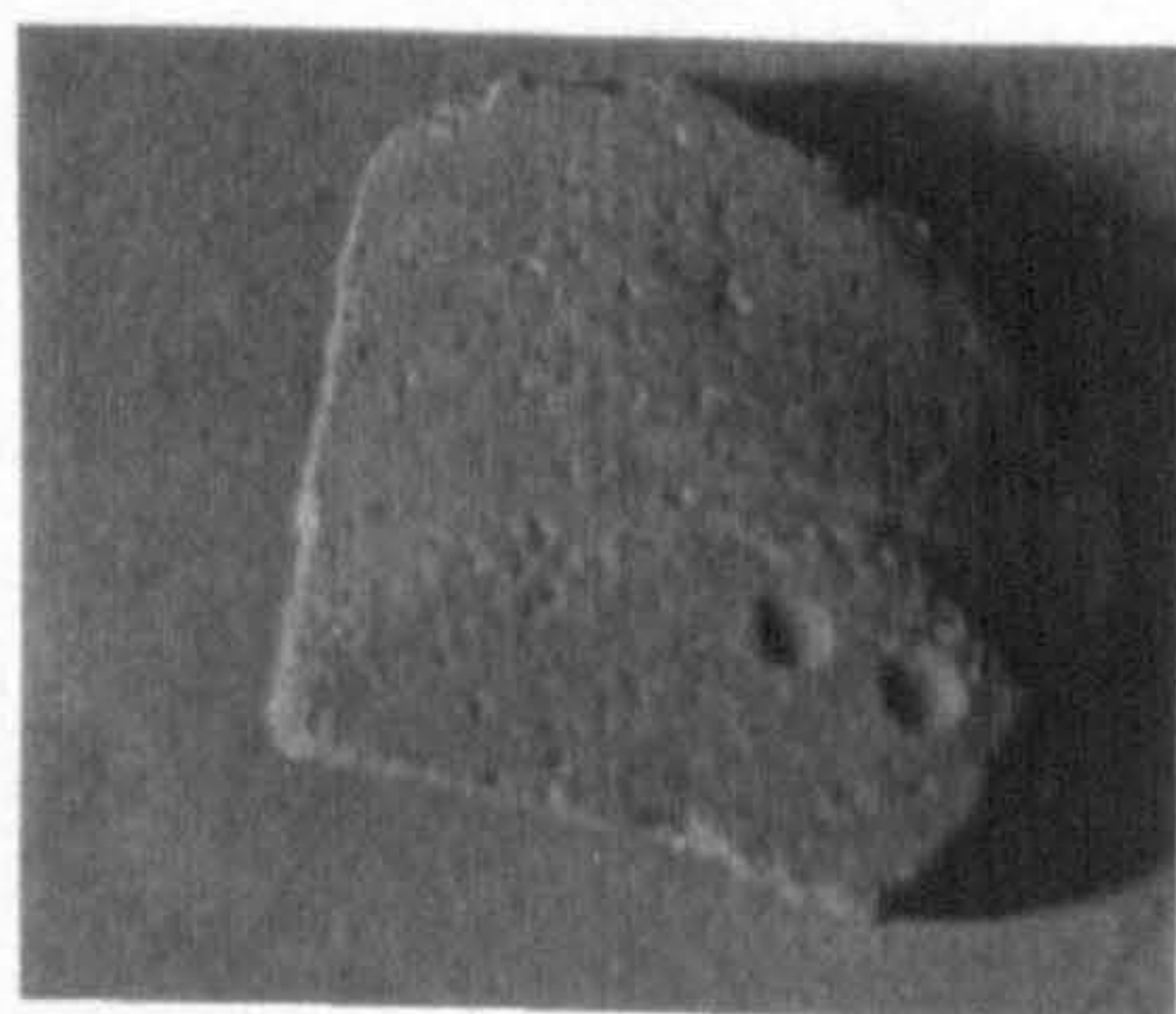


134

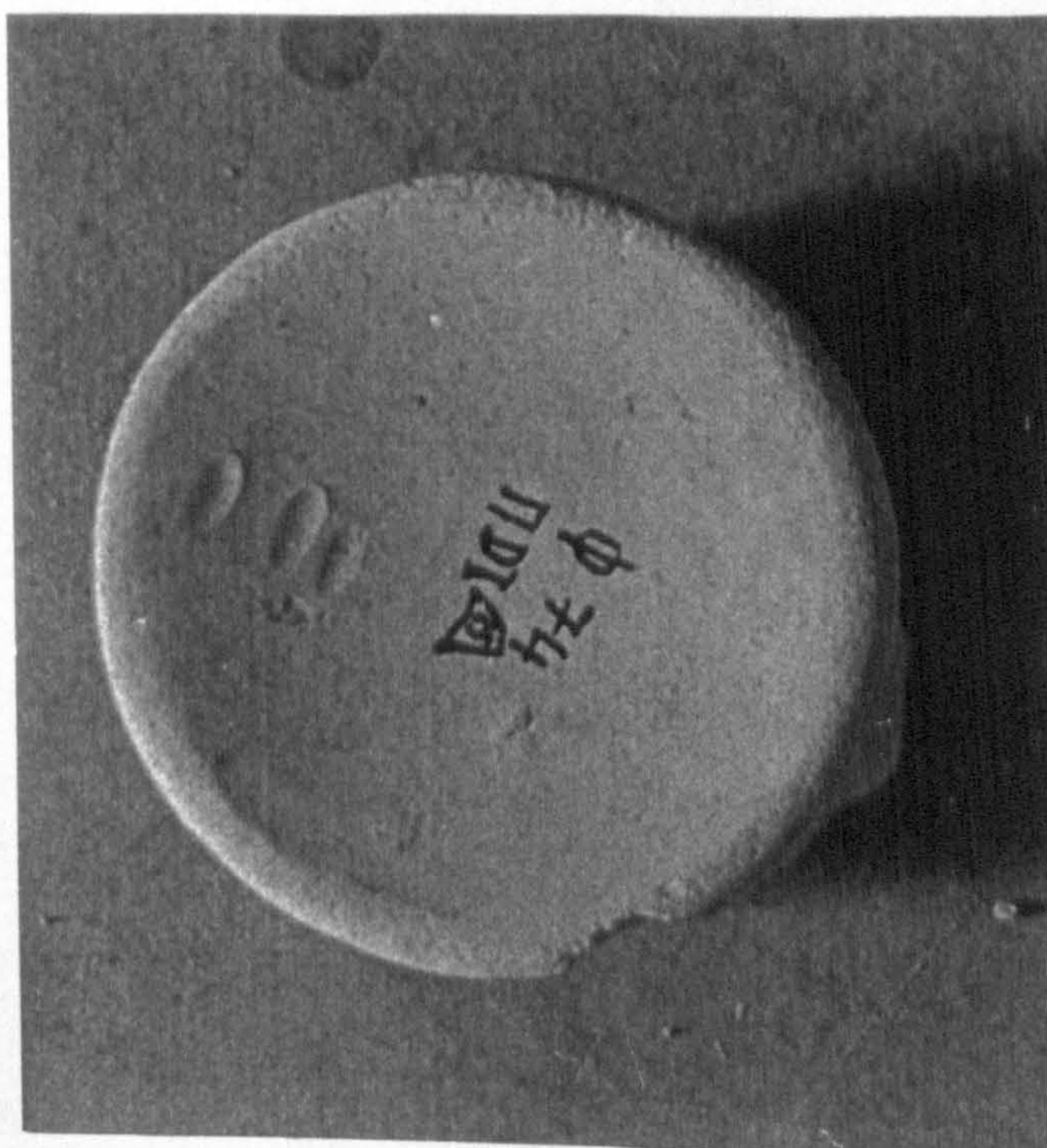
XXIX. Phylakopi 1974-77 130-134. Various scales



135

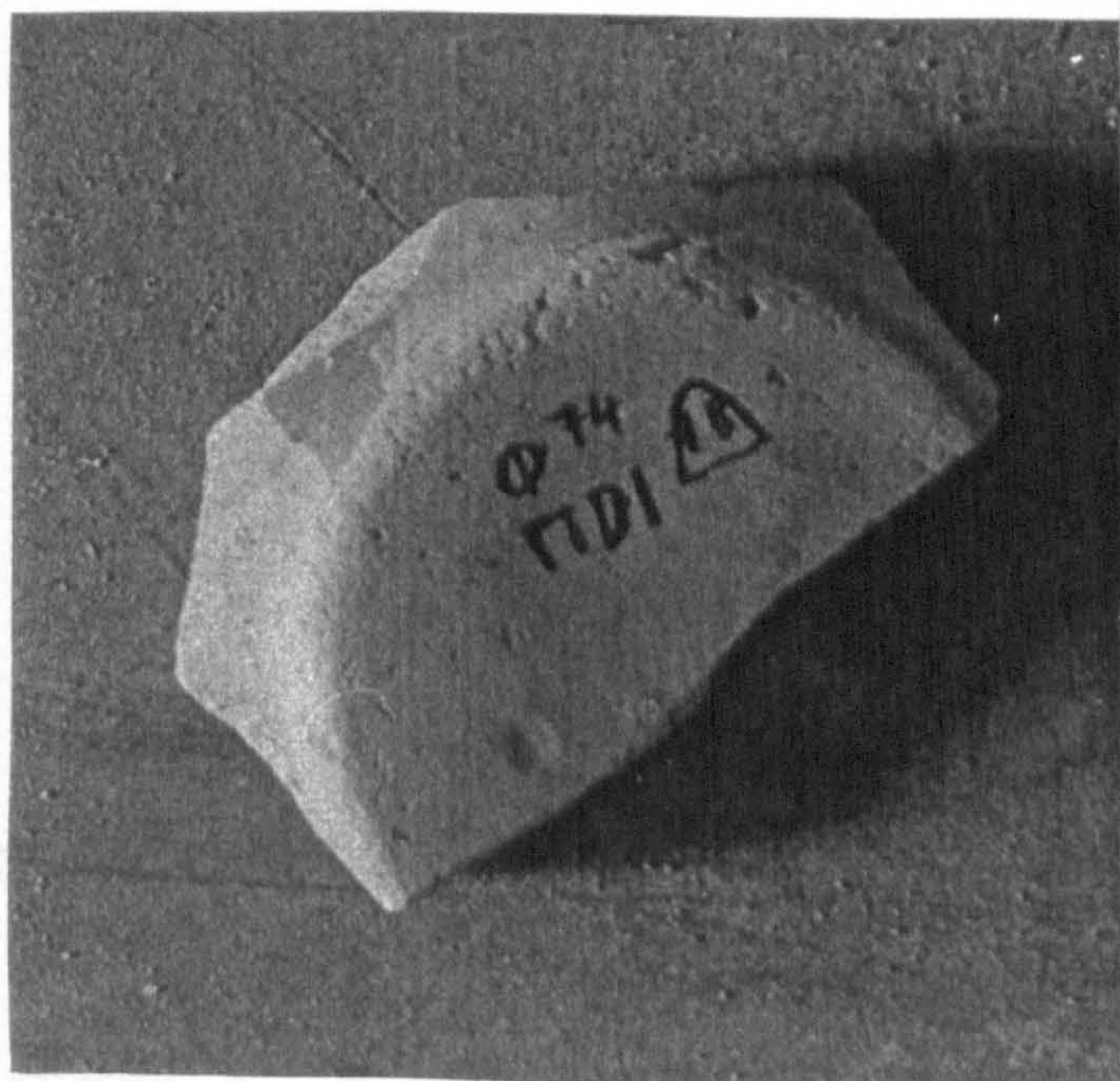


136



137

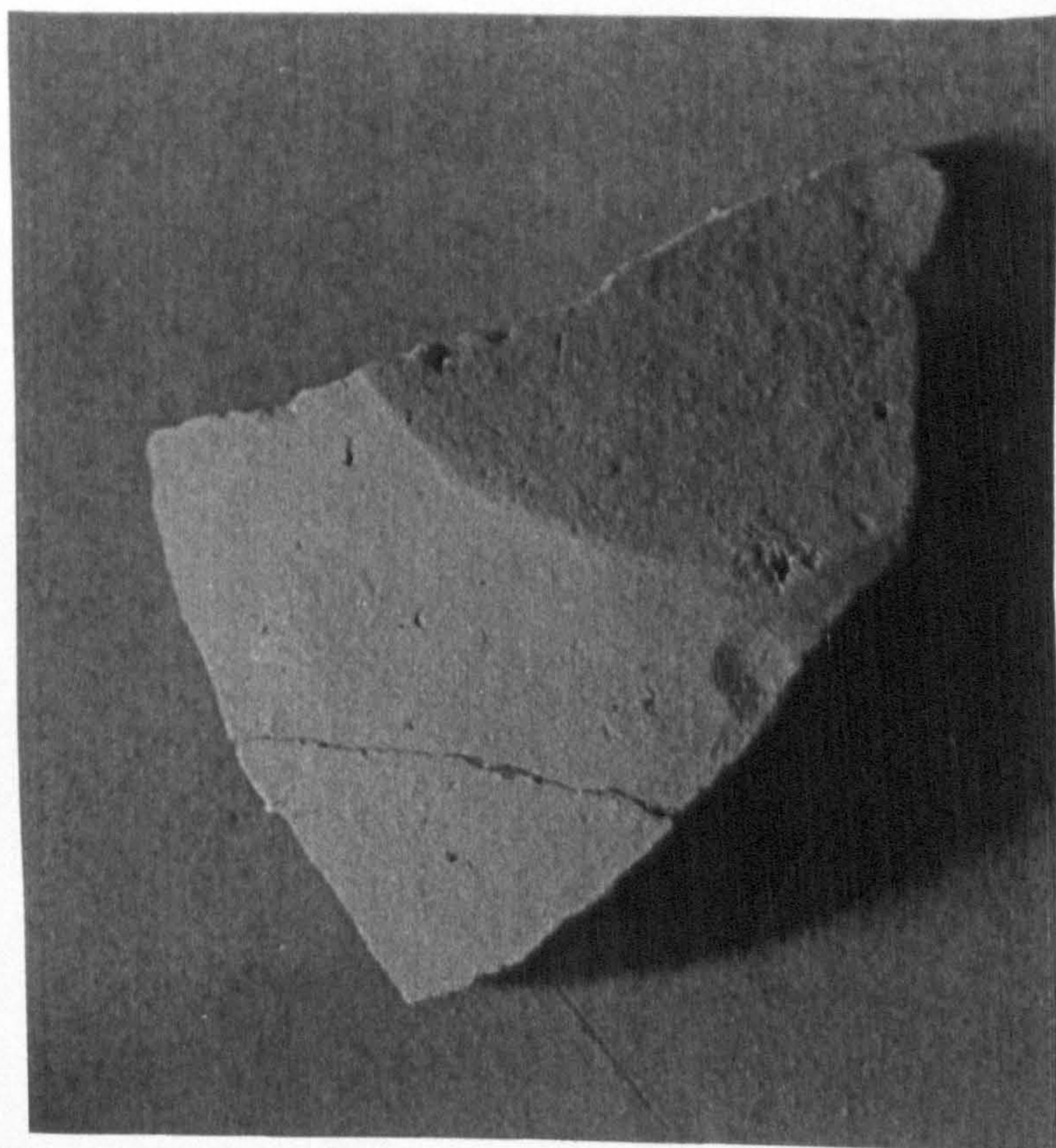
XXX. Phylakopi 1974-77 135-137. Various scales



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140

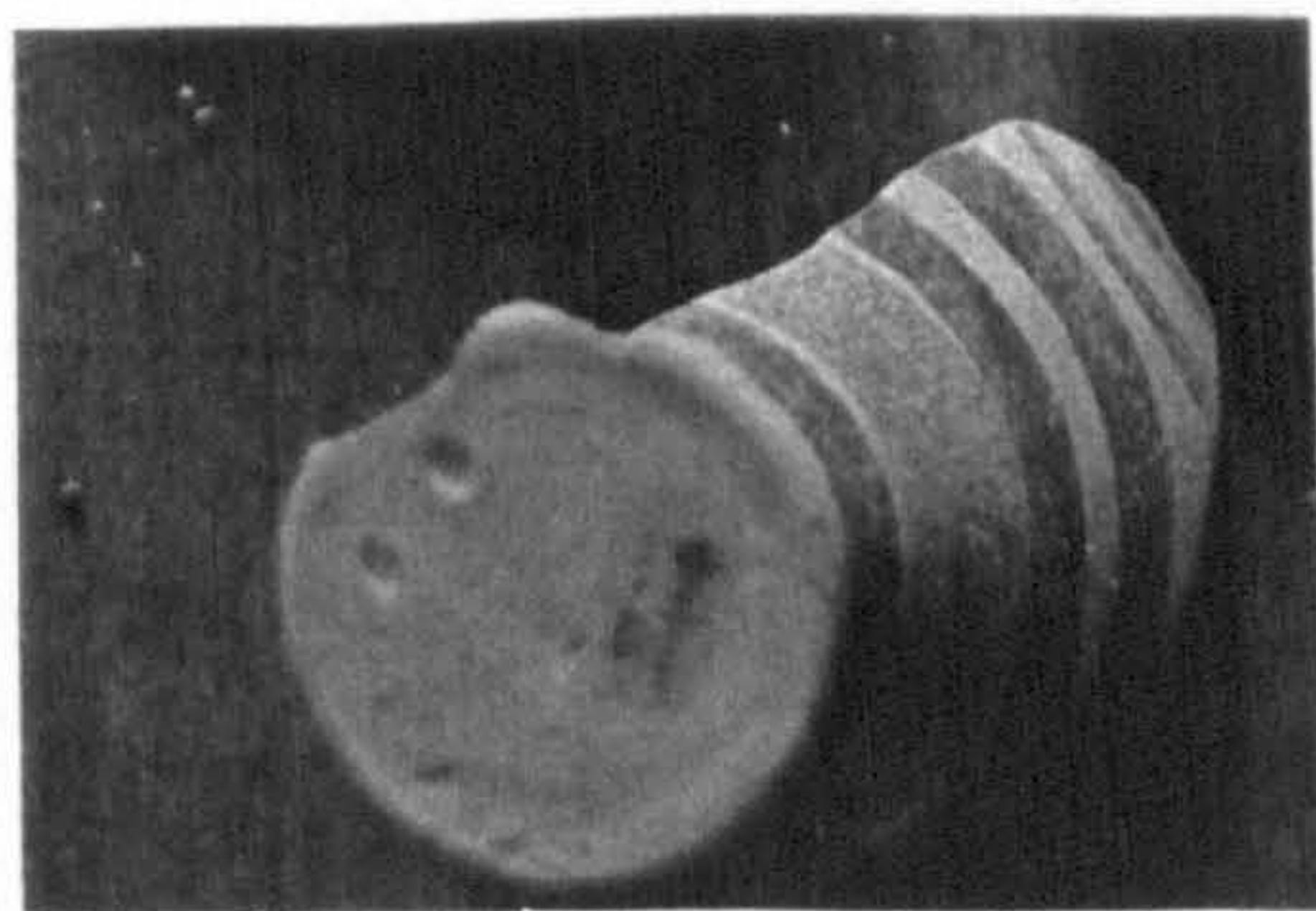


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XXXI. Phylakopi 1974-77 138-140. Various scales



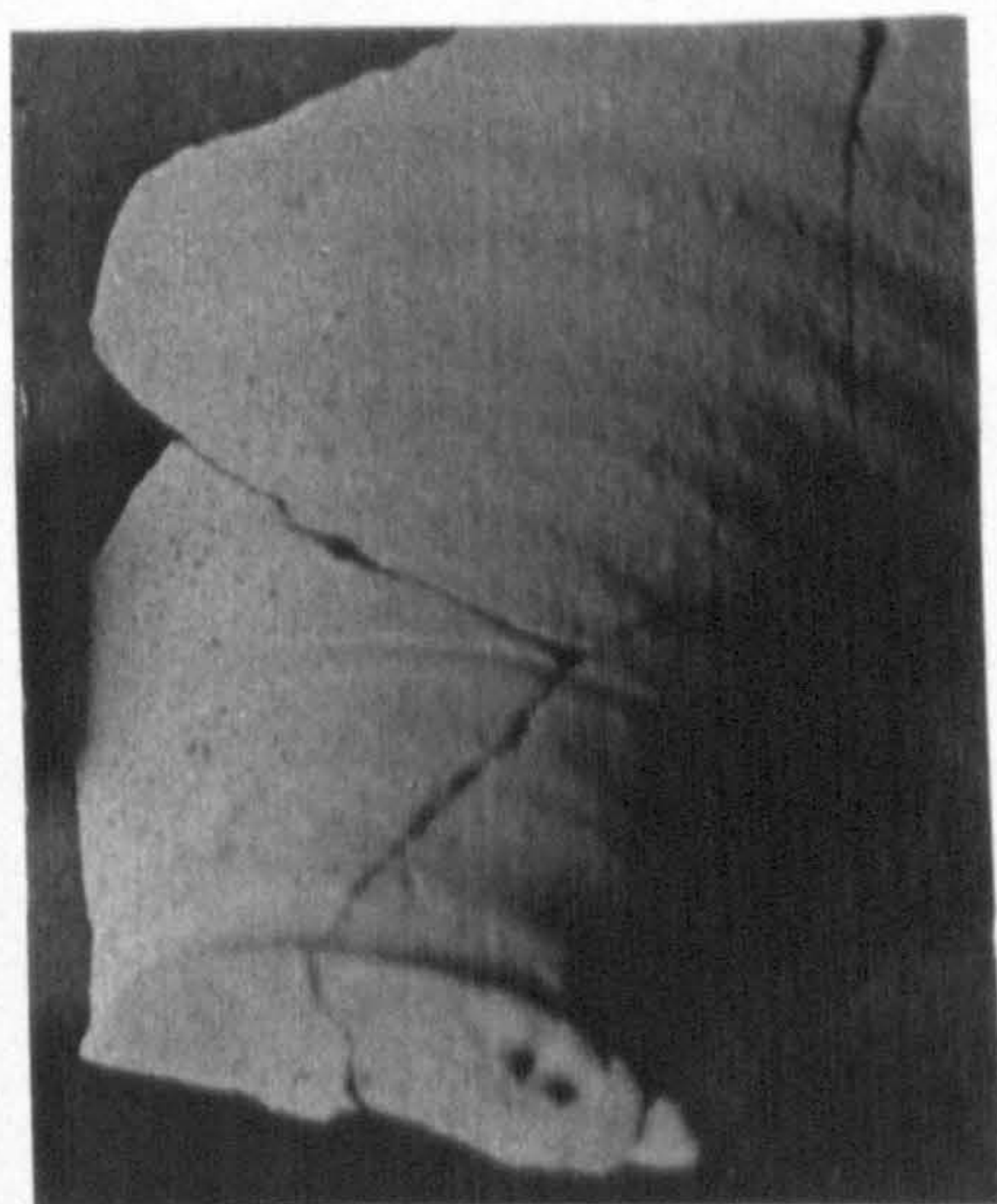
141



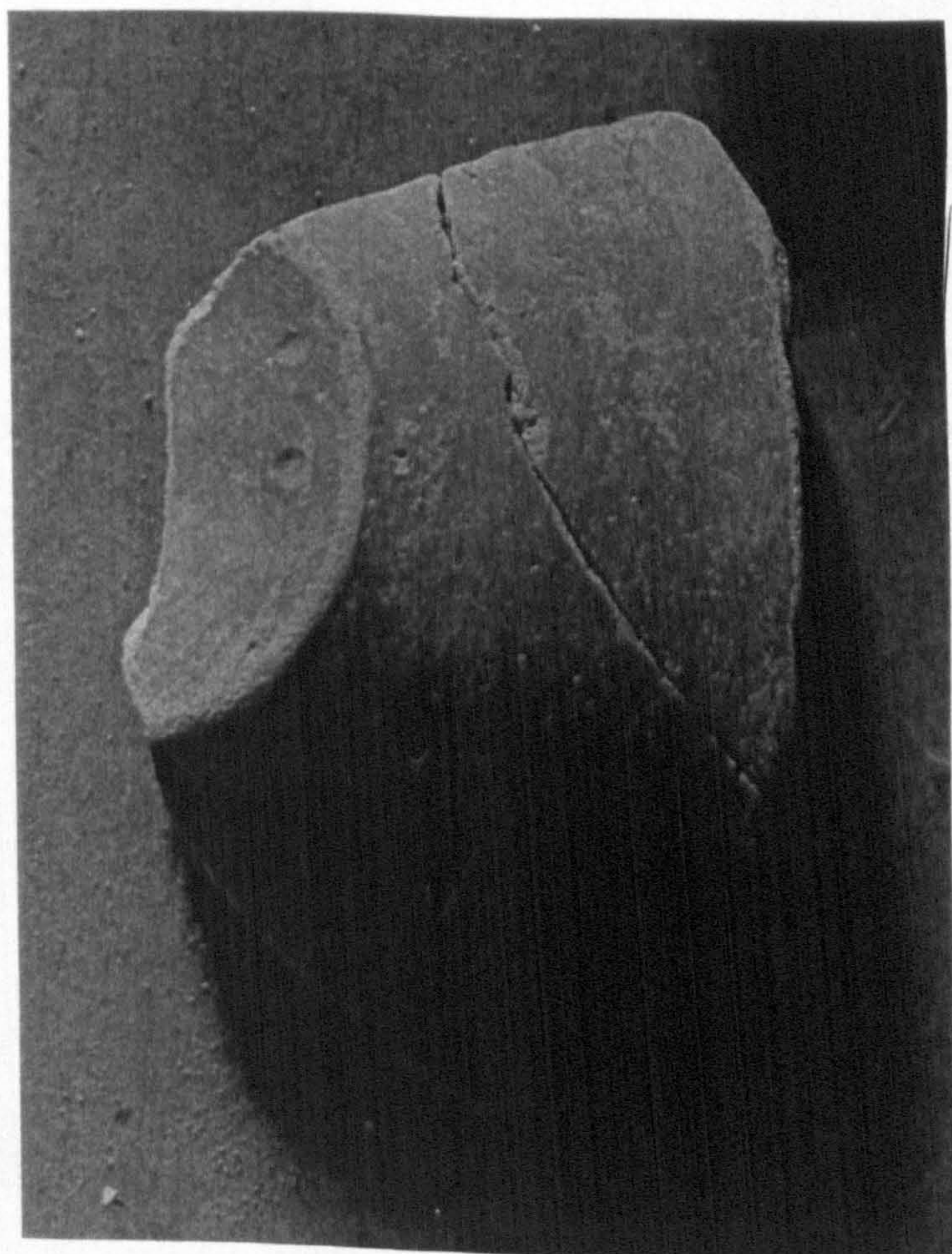
142



143

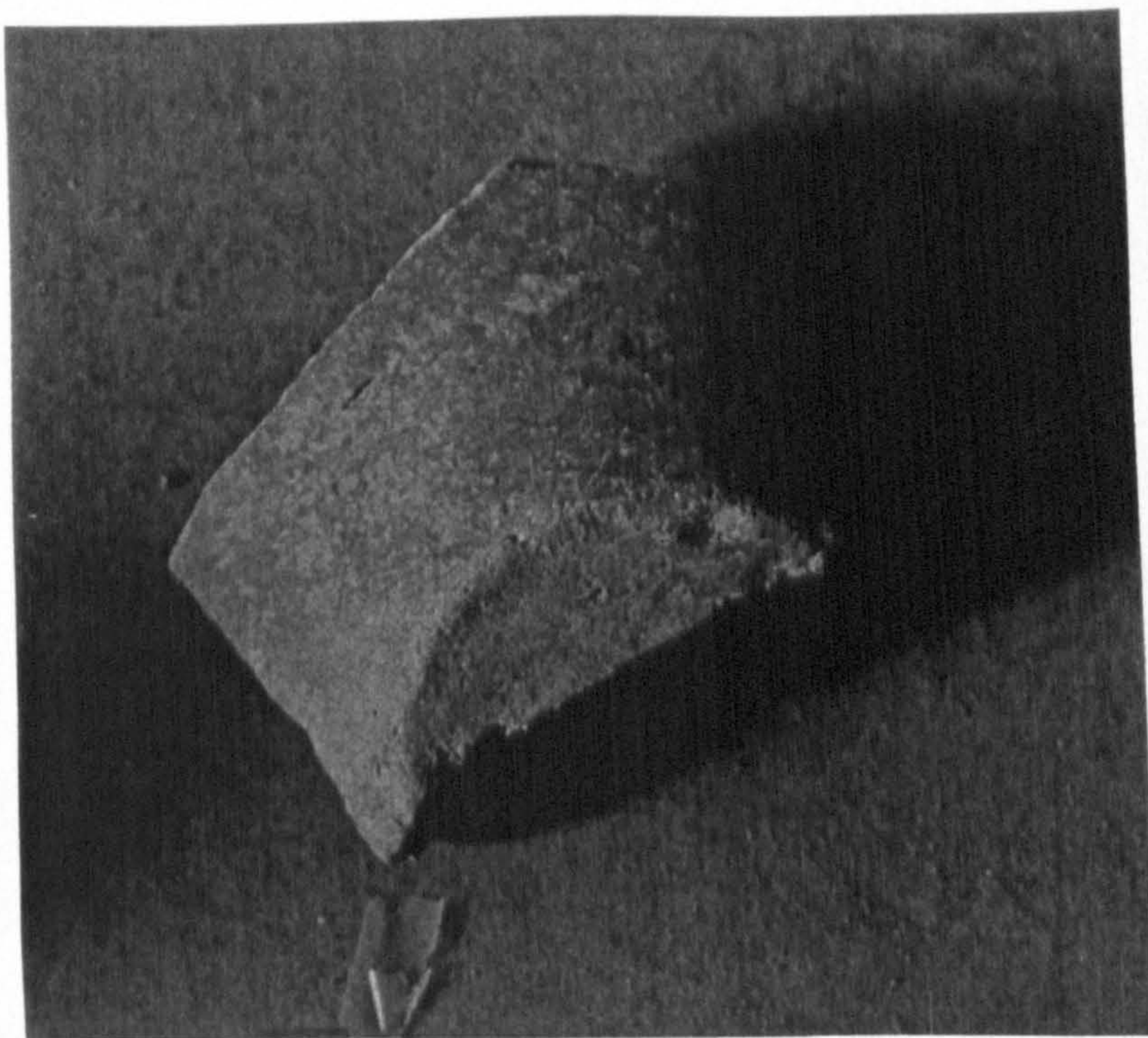


144

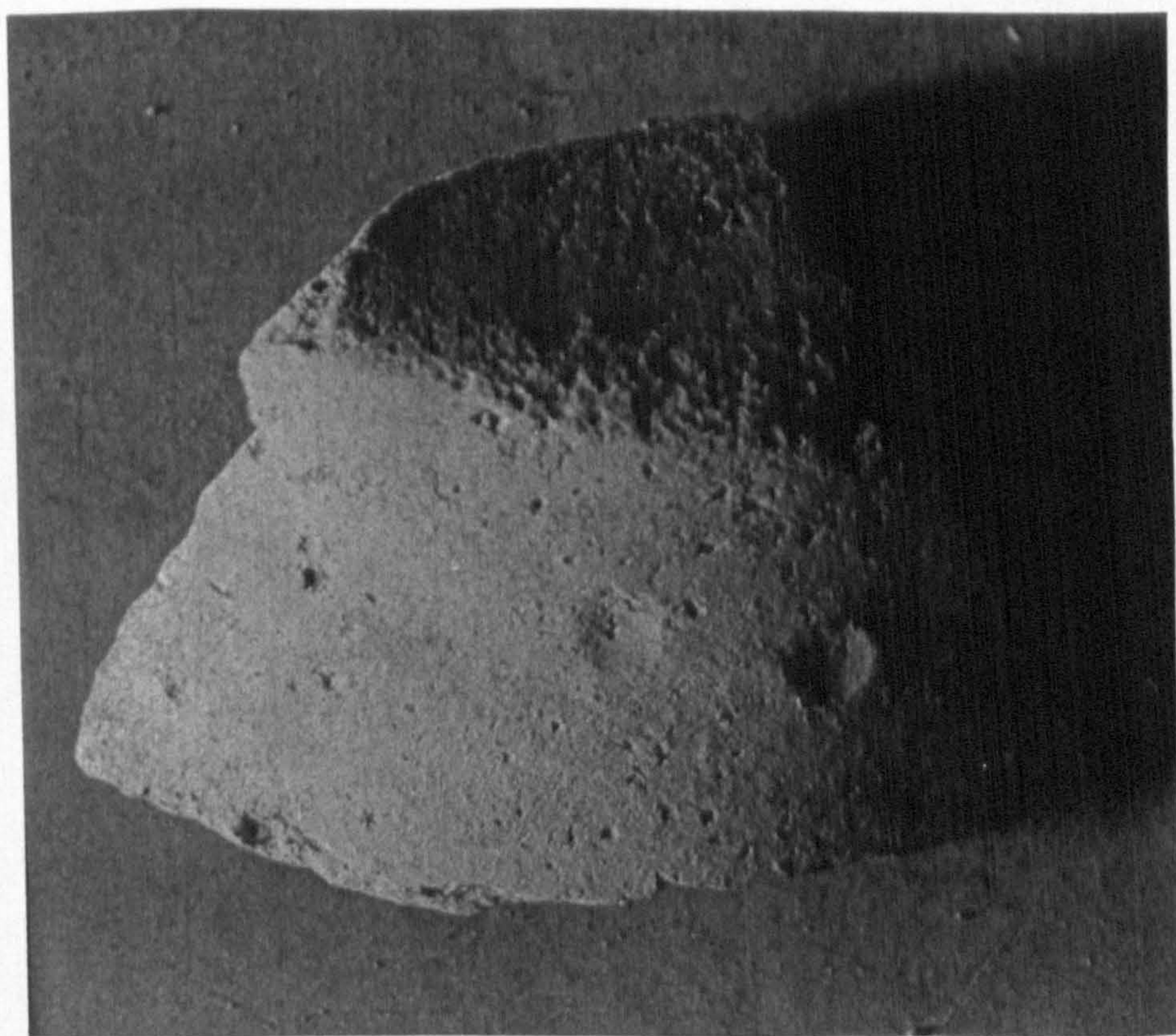


145

XXXII. Phylakopi 1974-77 141-145. Various scales

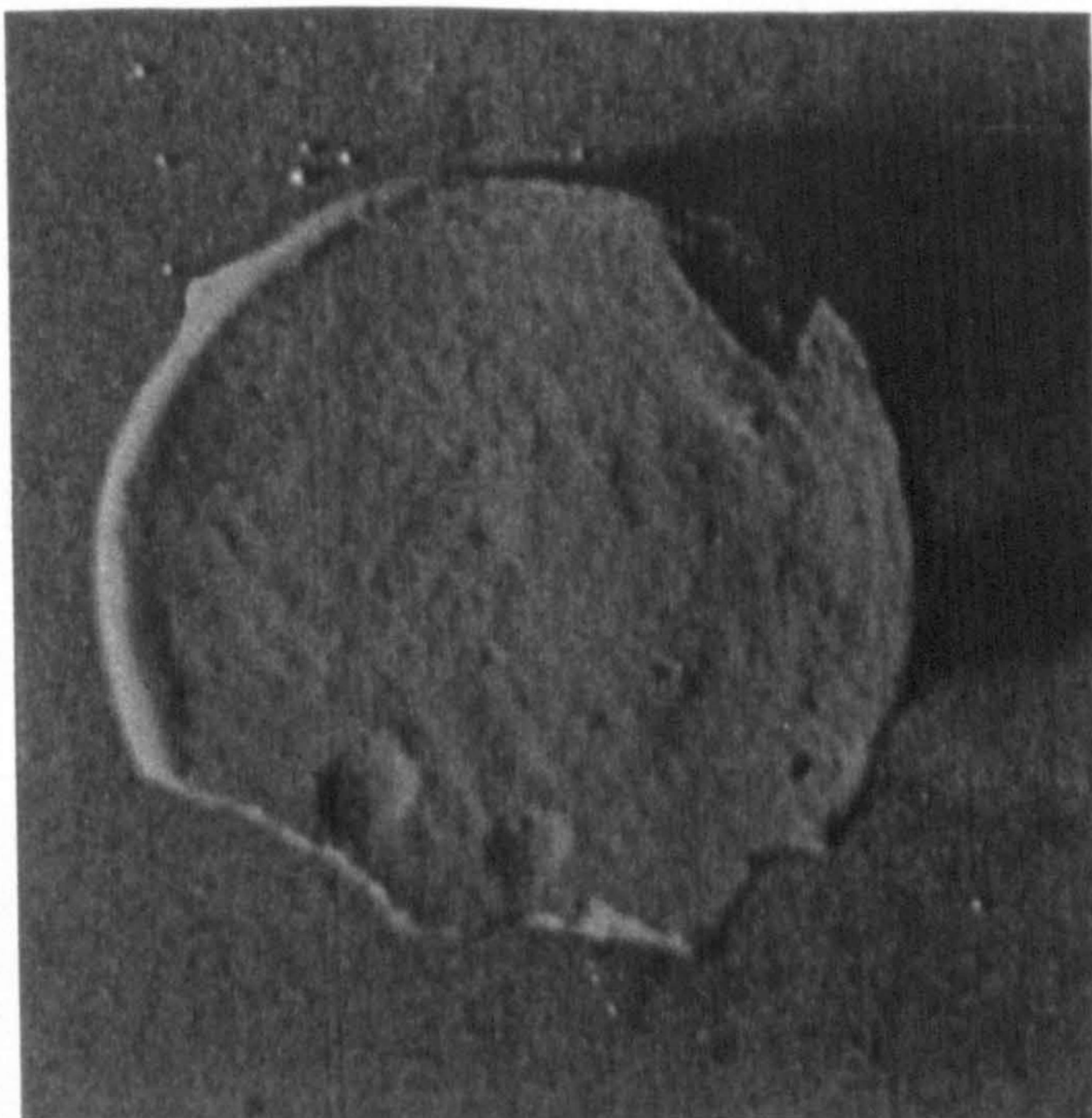


146



147

XXXIII. Phylakopi 1974-77 146,147. Various scales



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151

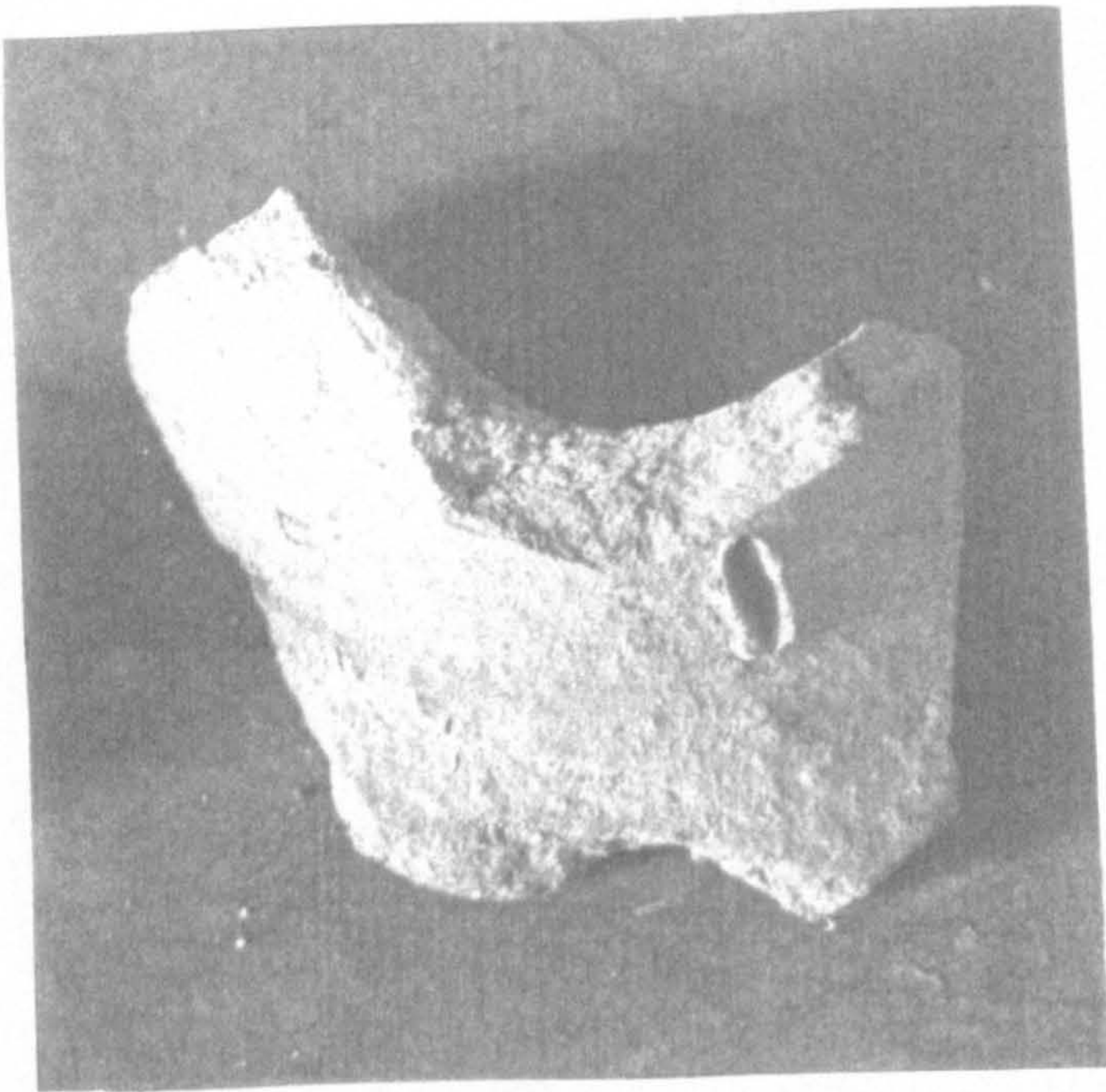


149

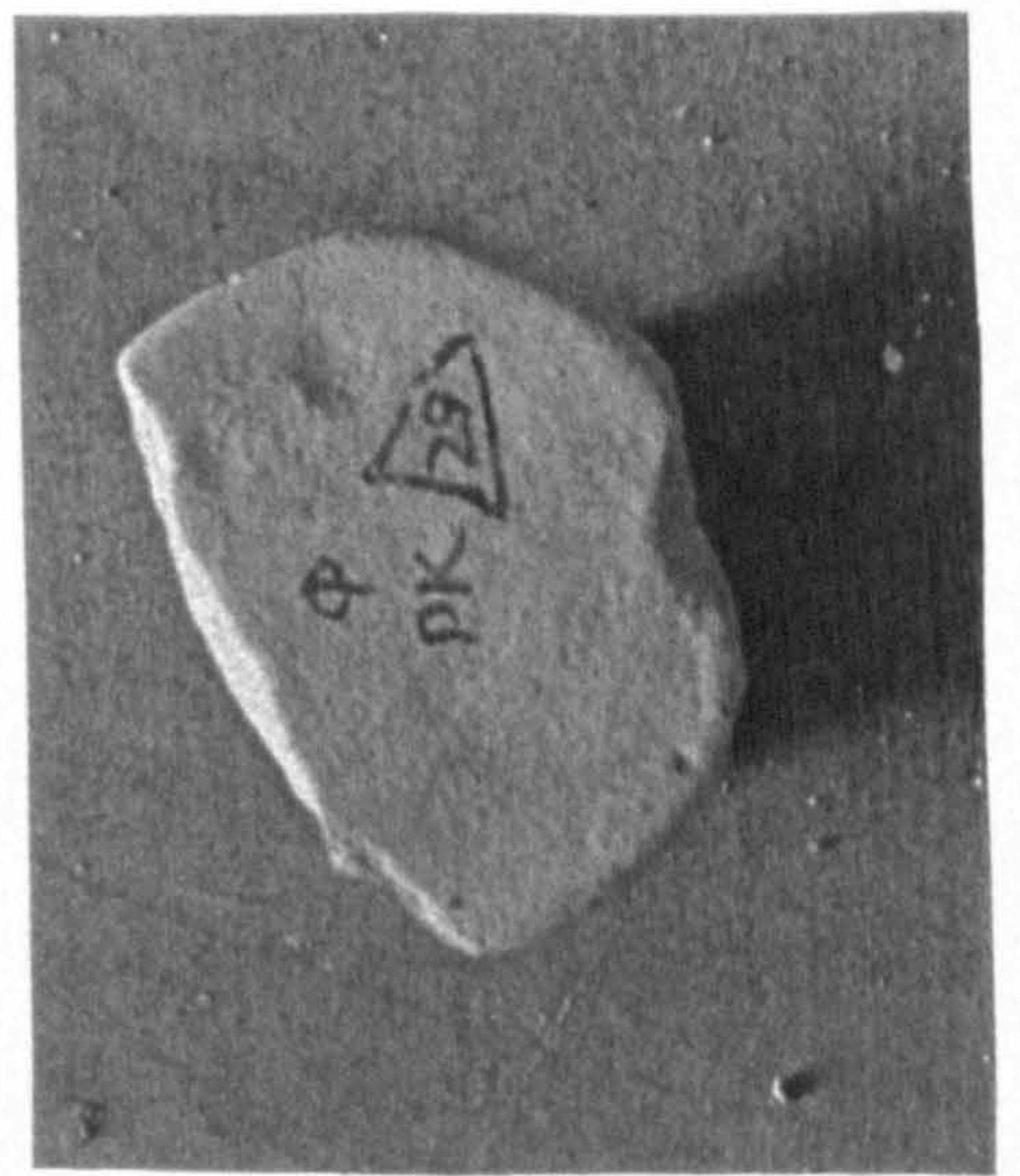


152

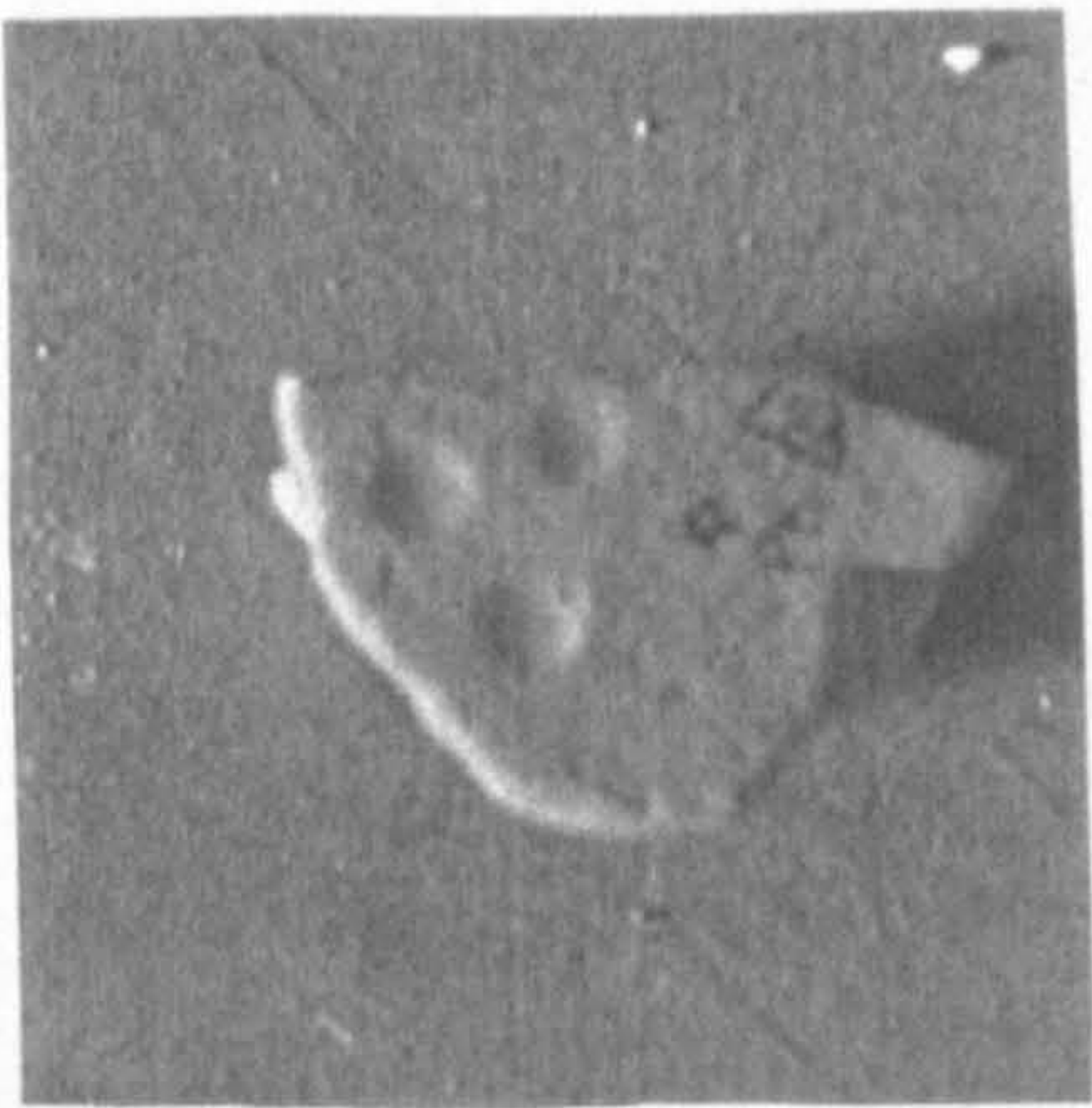
XXXIV. Phylakopi 1974-77 148,149,151,152. Various scales



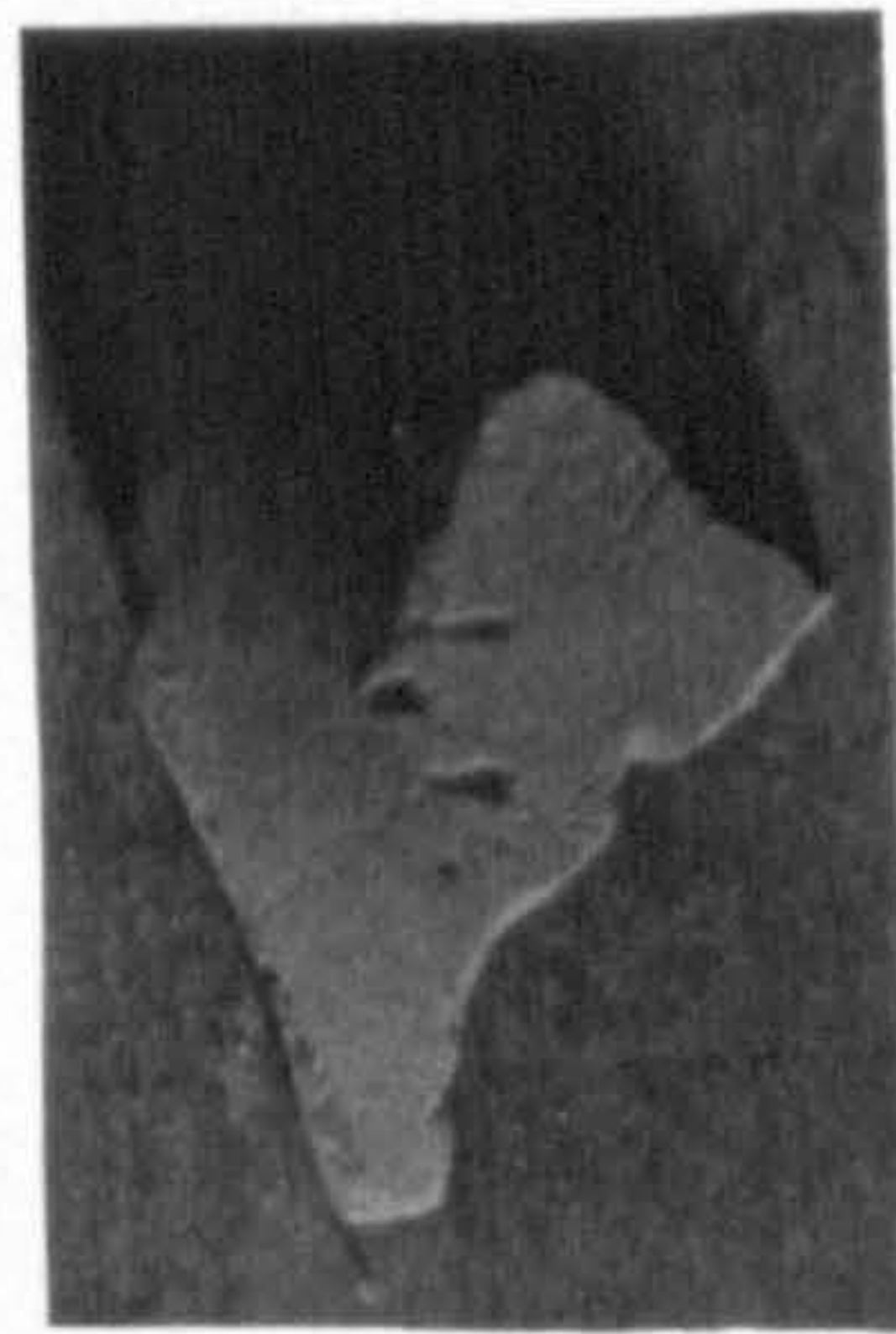
150



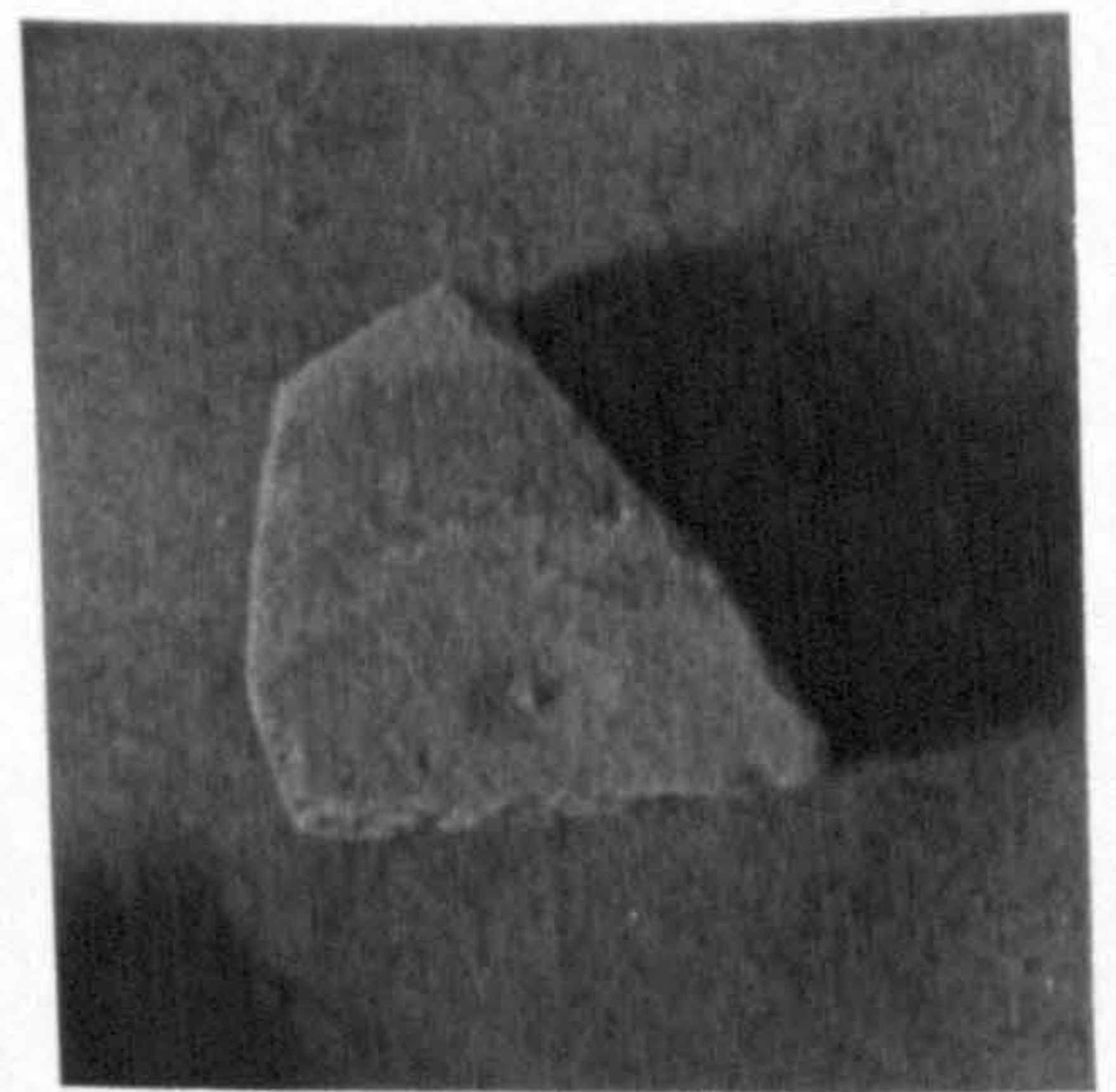
153



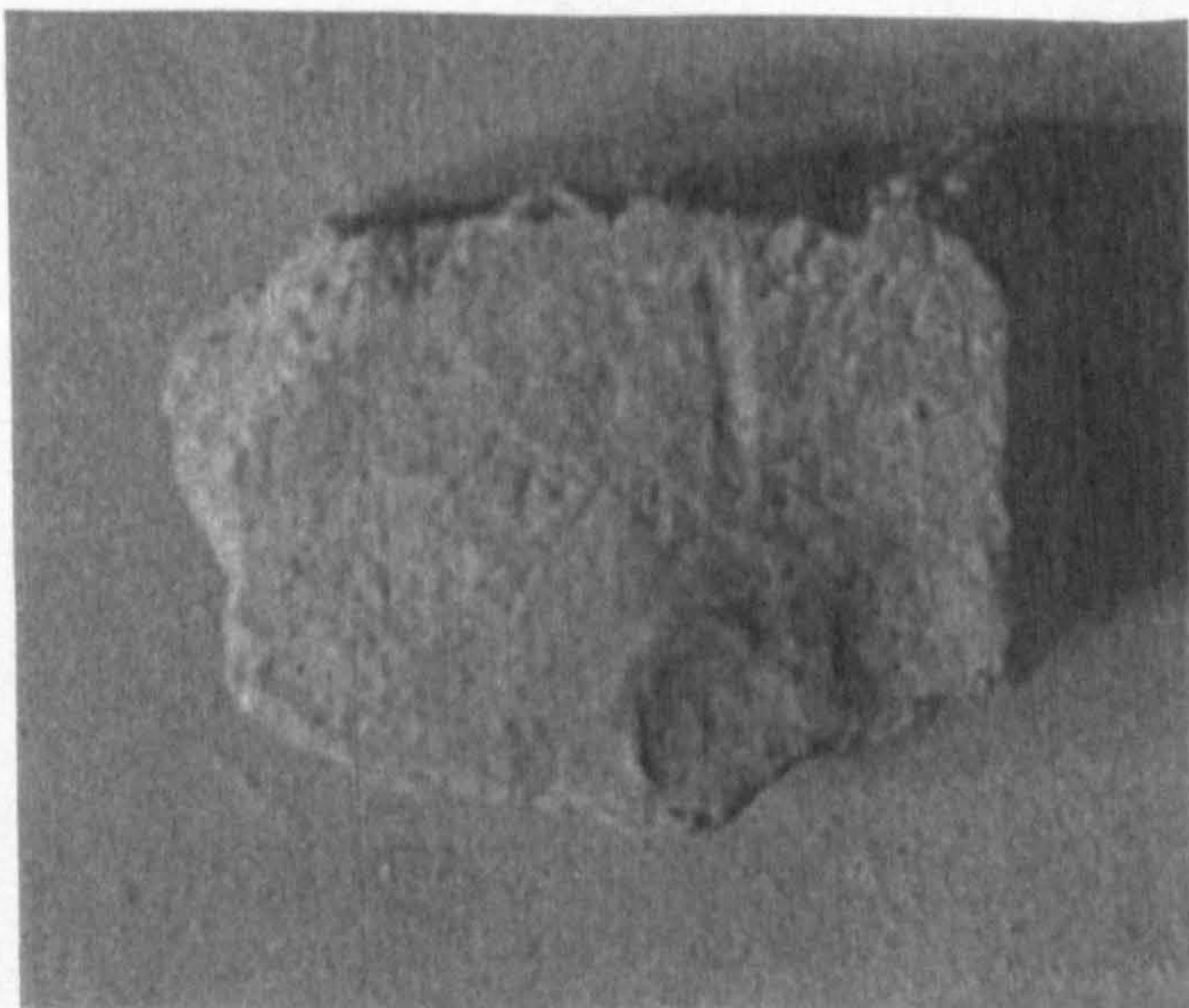
154



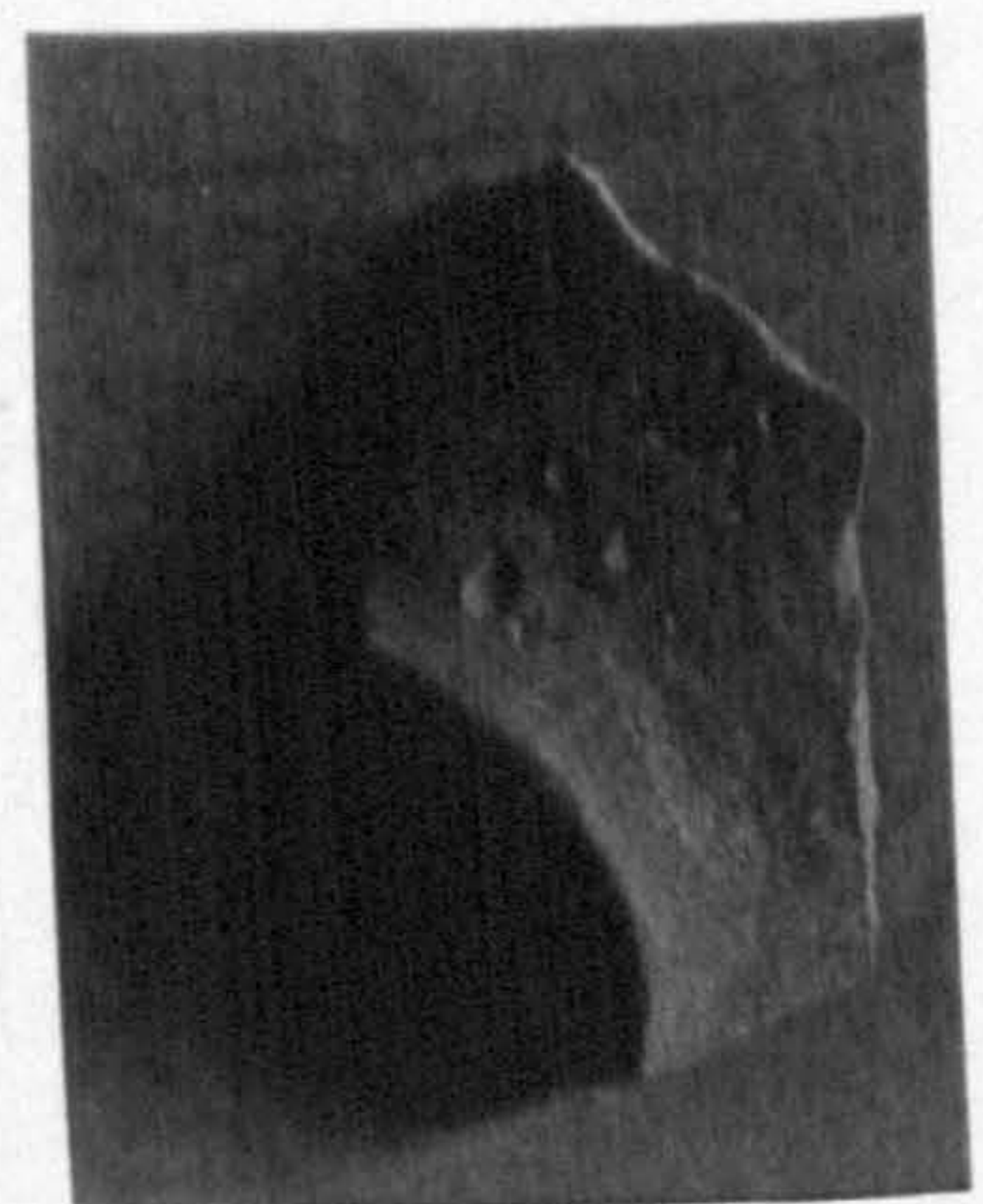
155



157

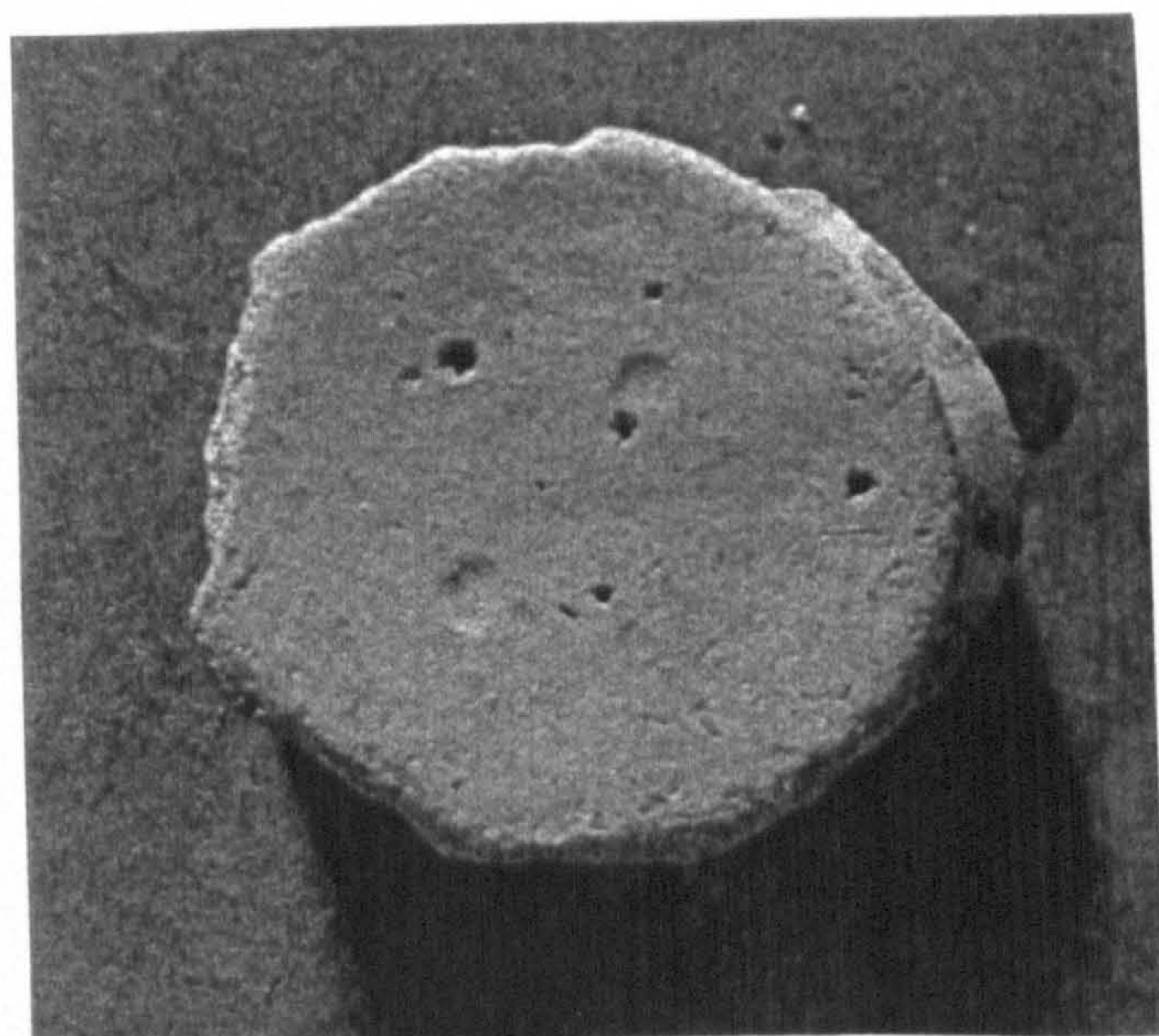


156

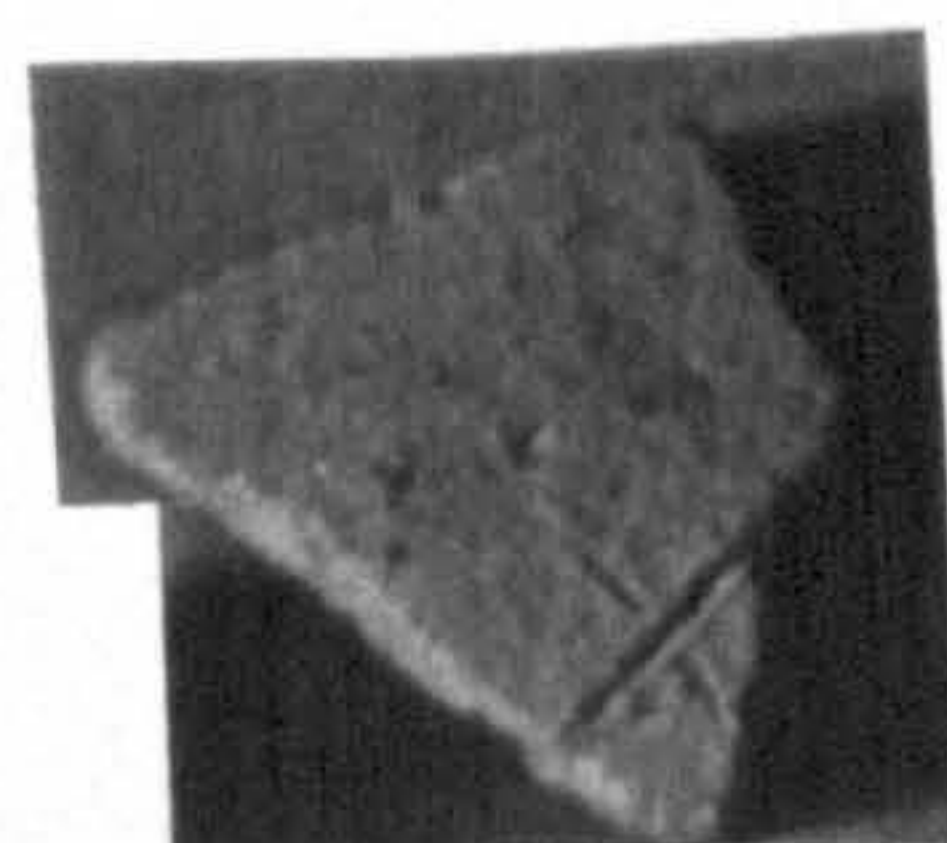


158

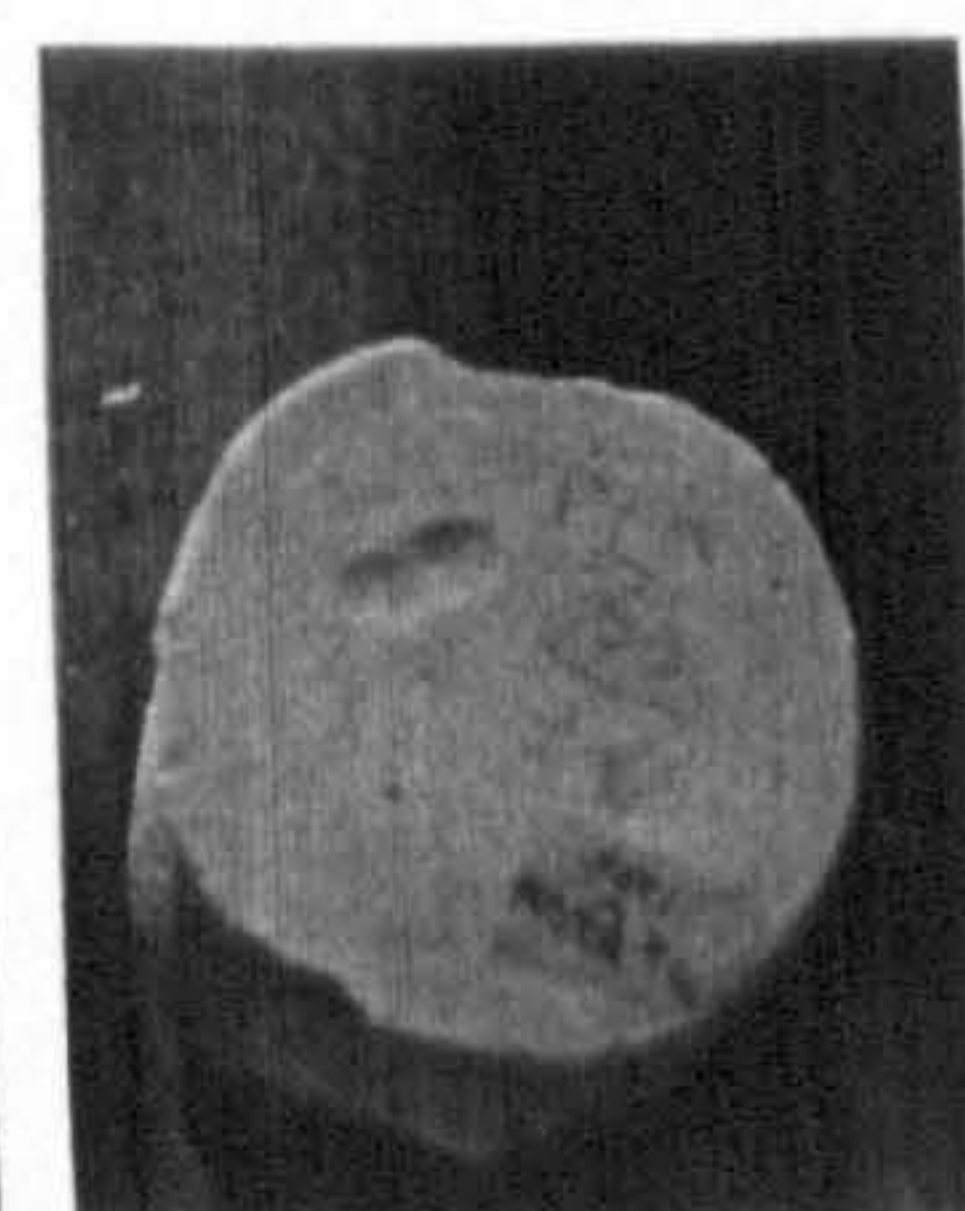
XXXV. Phylakopi 1974-77 150, 153-158. Various scales



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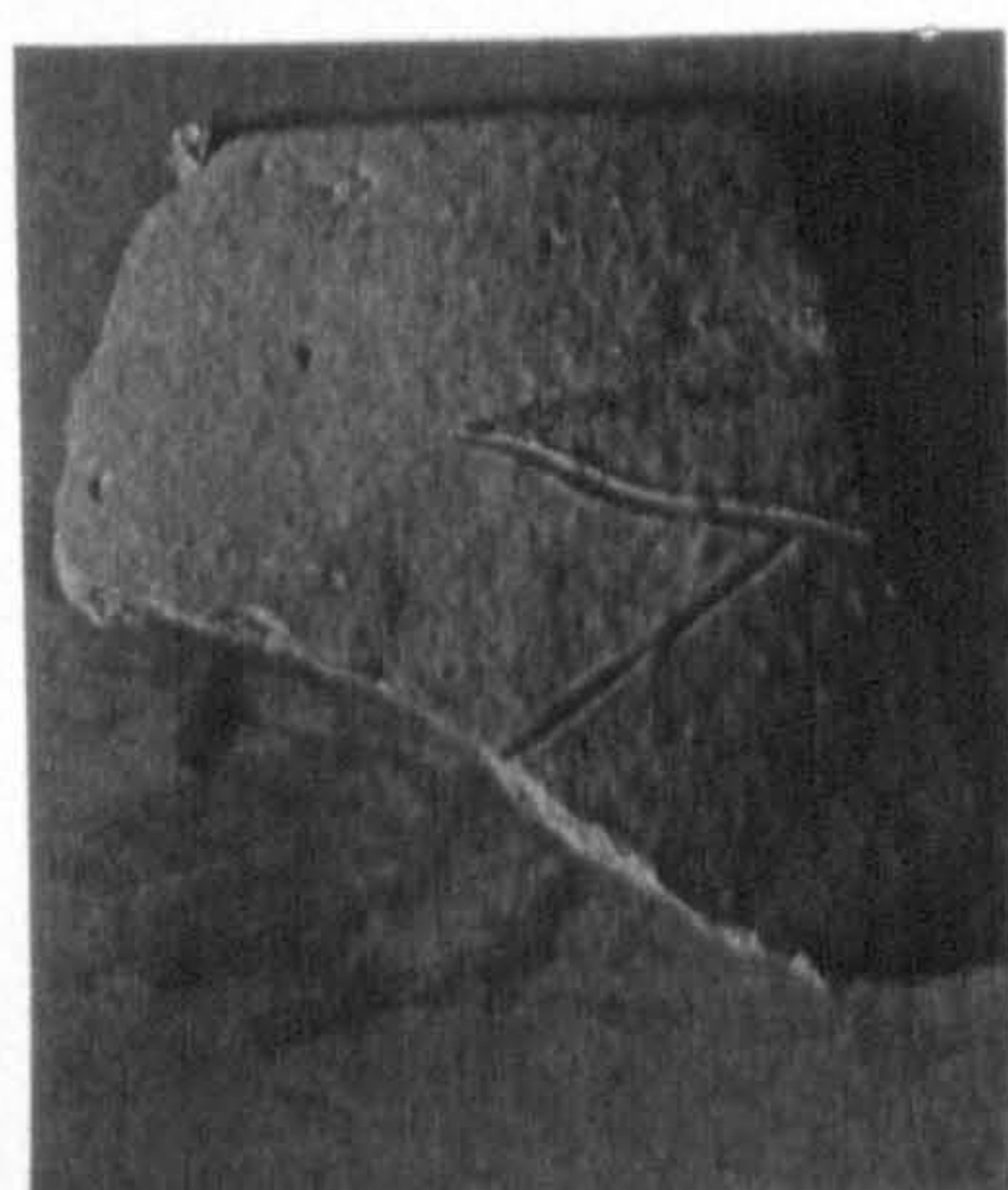
160



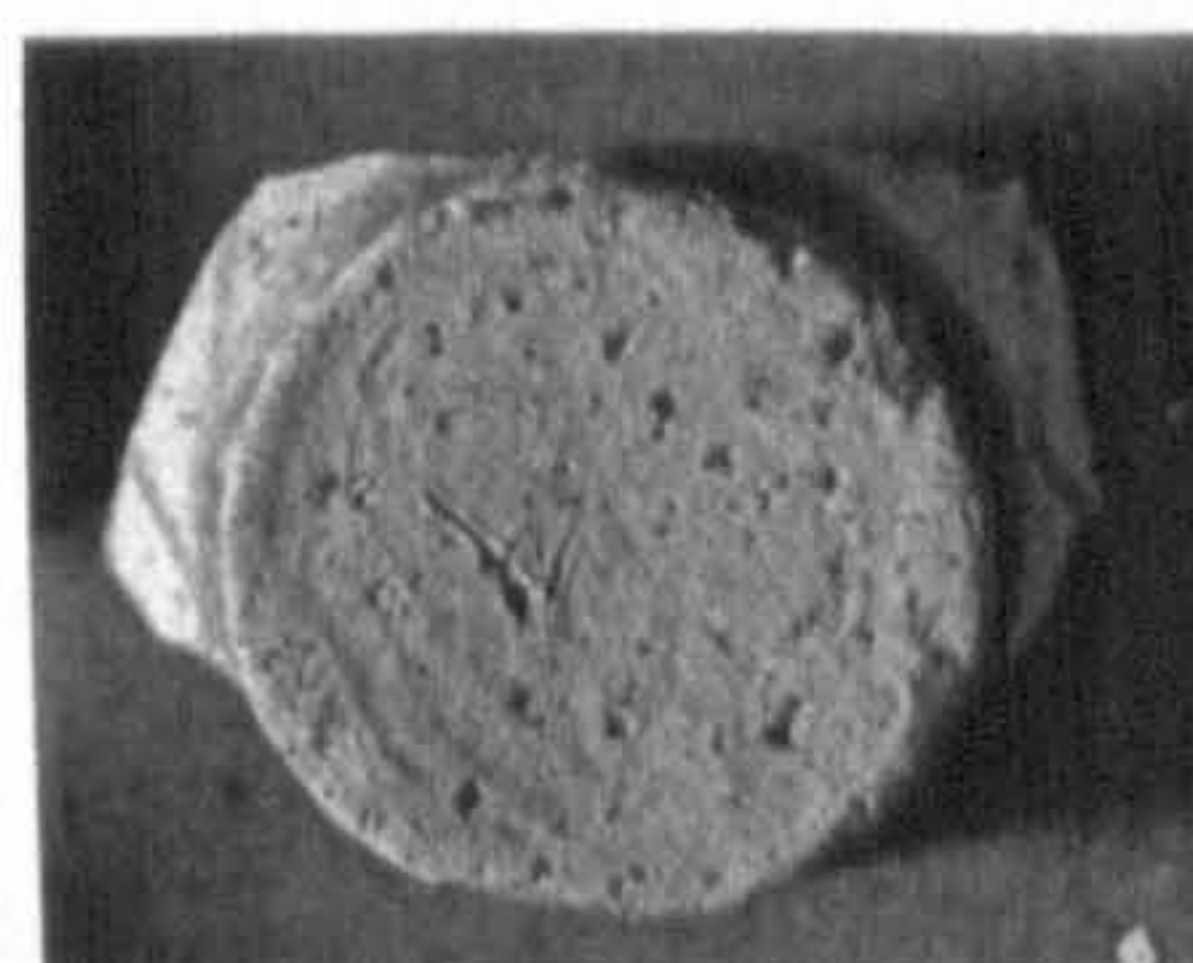
162



161



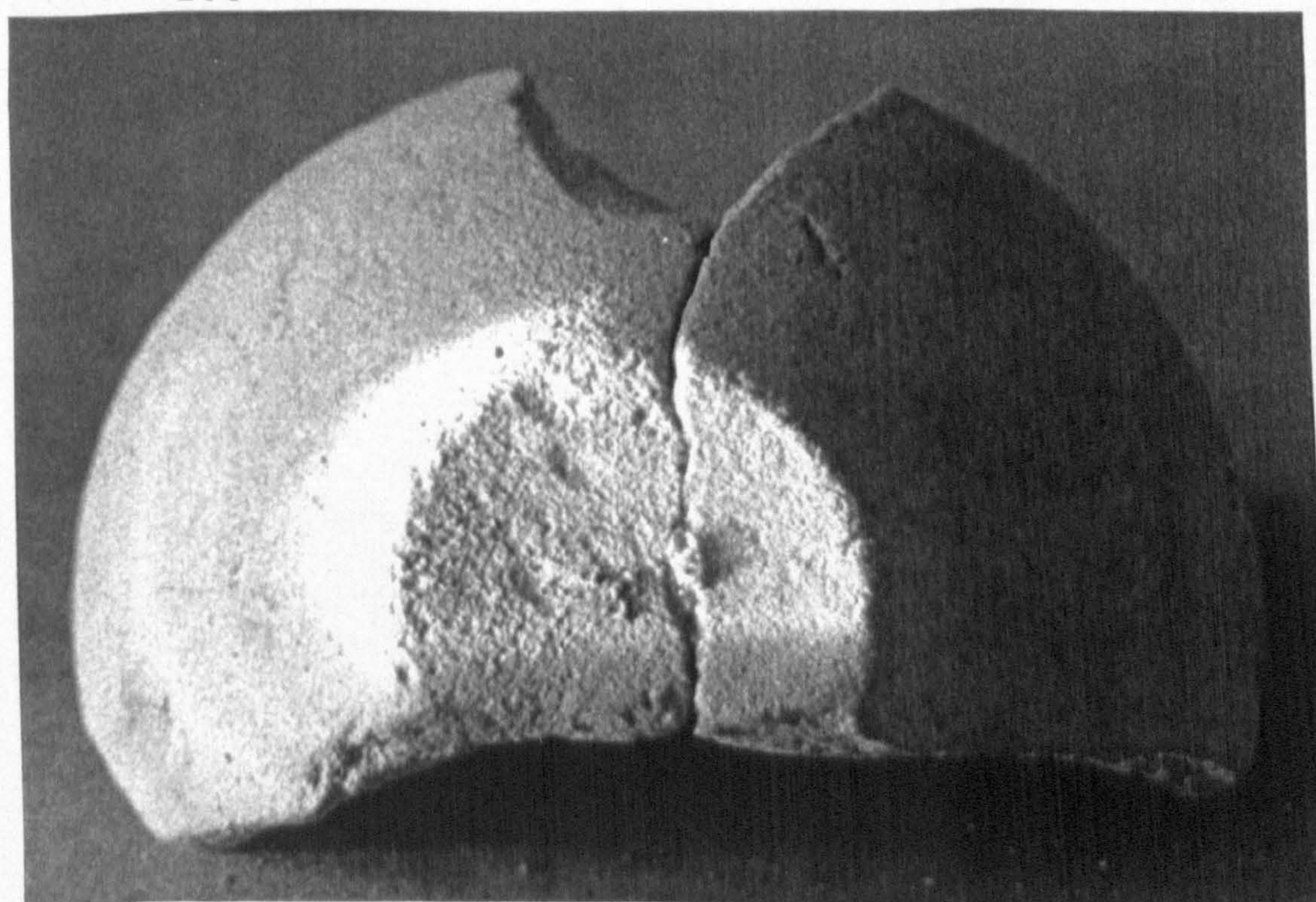
163



165

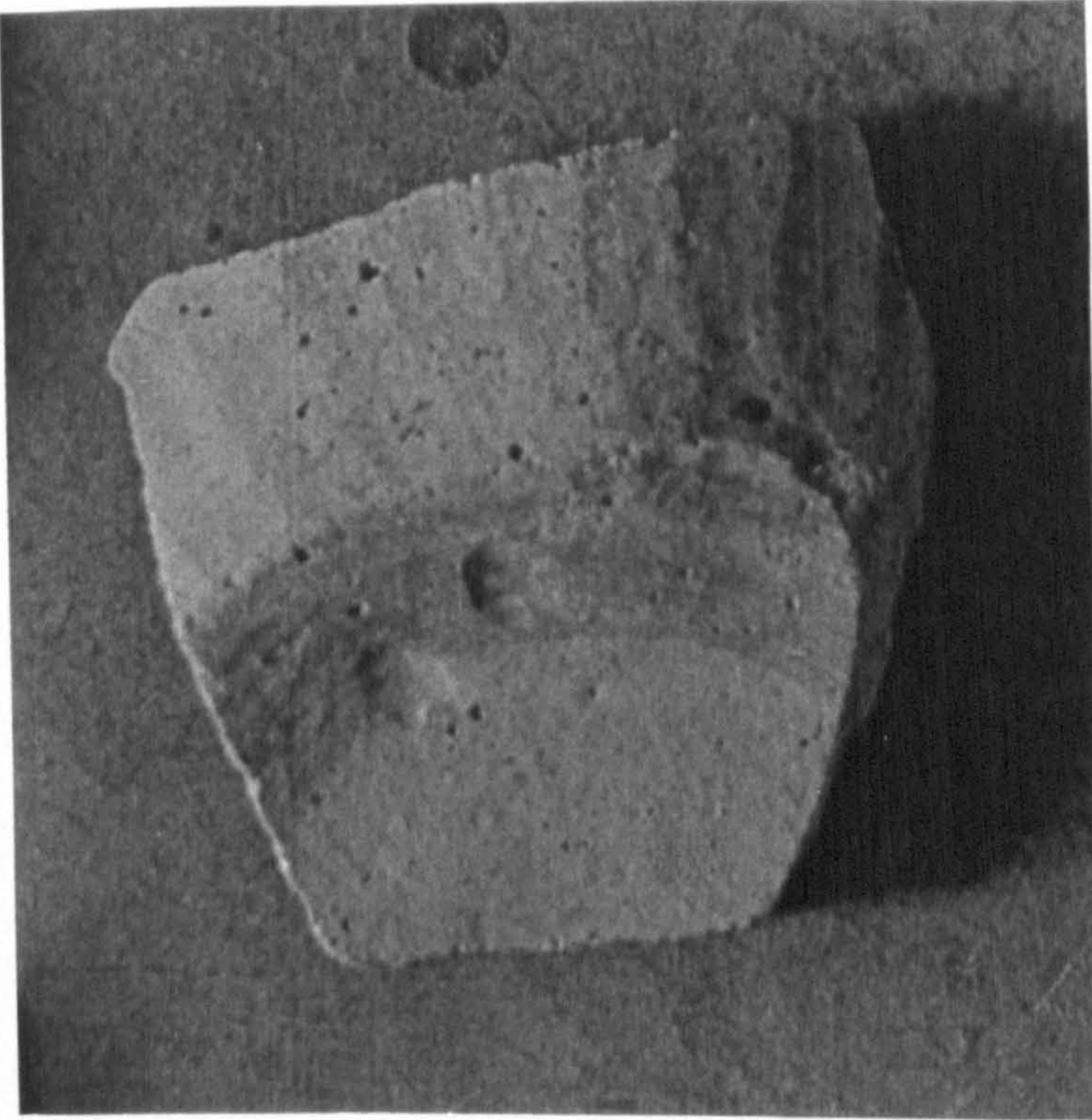


166

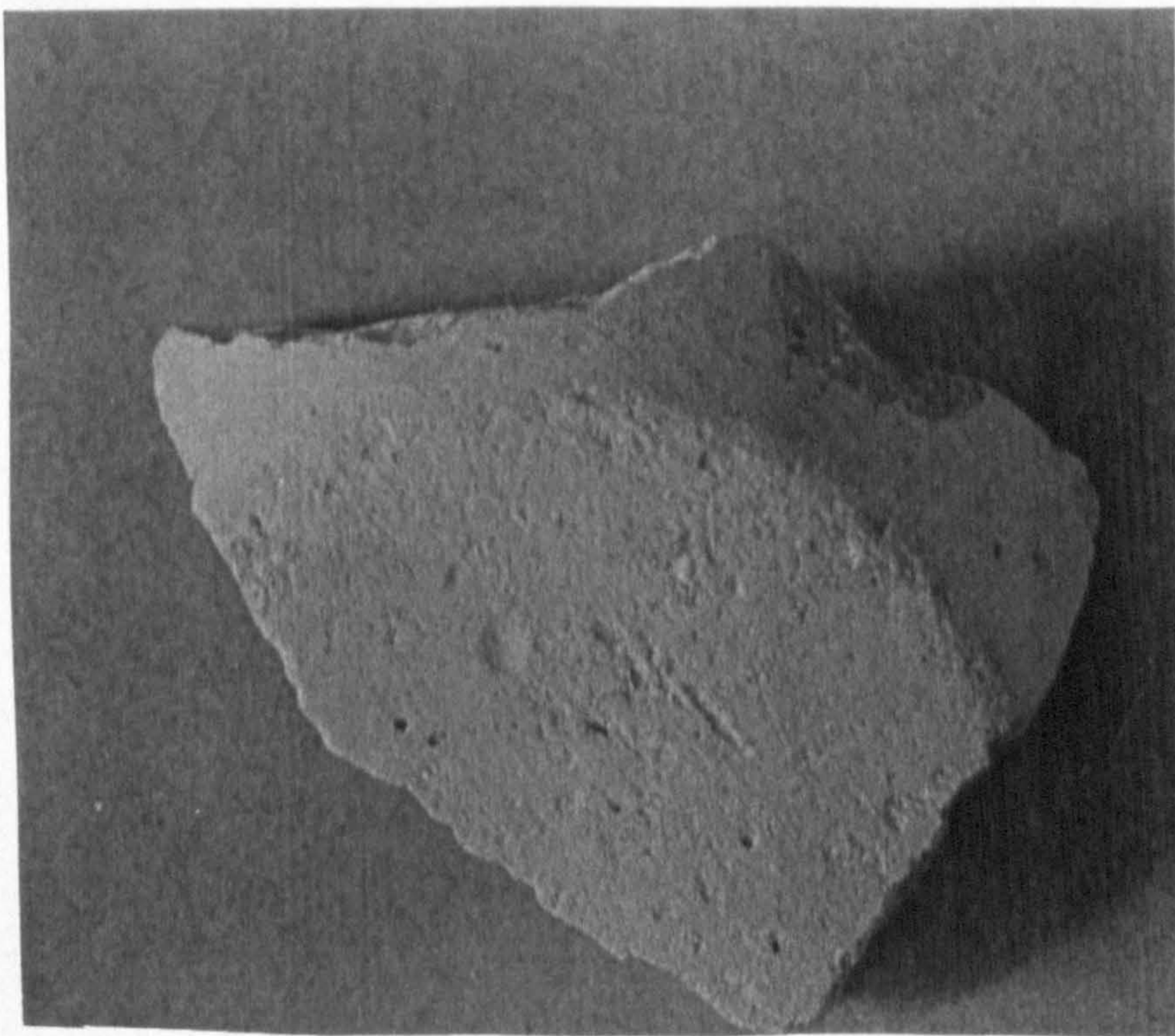


164

XXXVI. Phylakopi 1974-77 159-166. Various scales

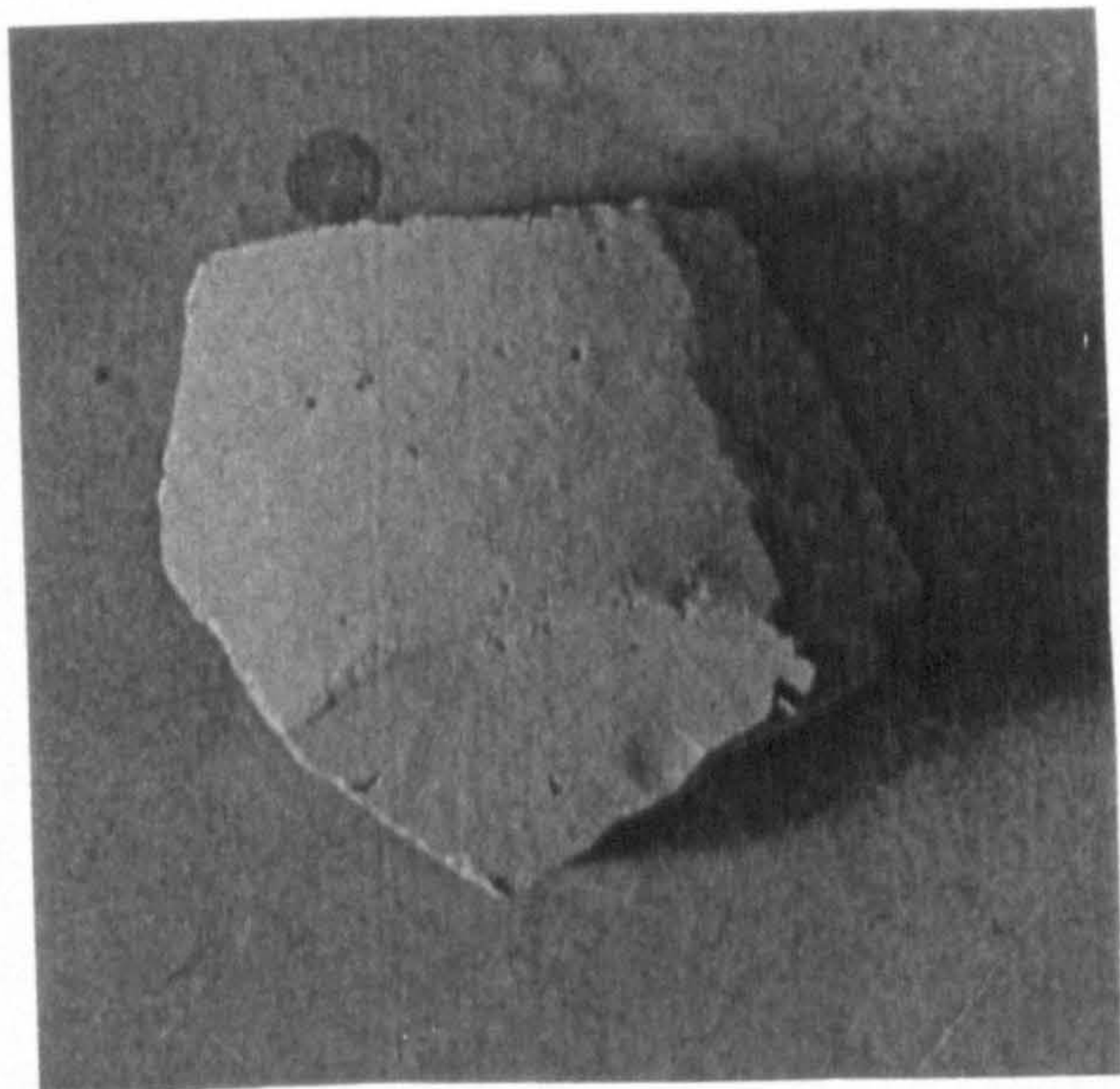


167

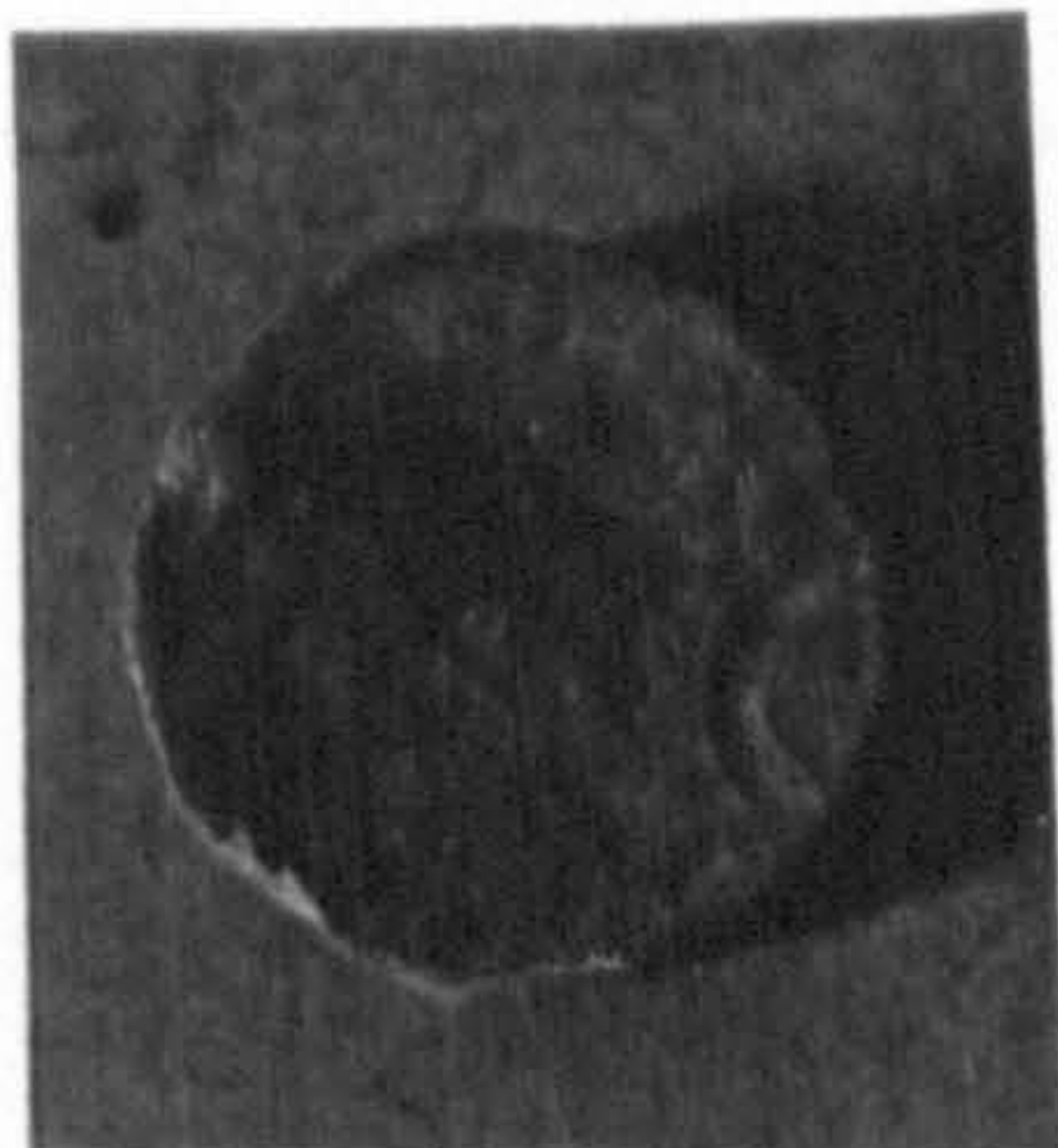


168

XXXVII. Phylakopi 1974-77 167, 168. Various scales



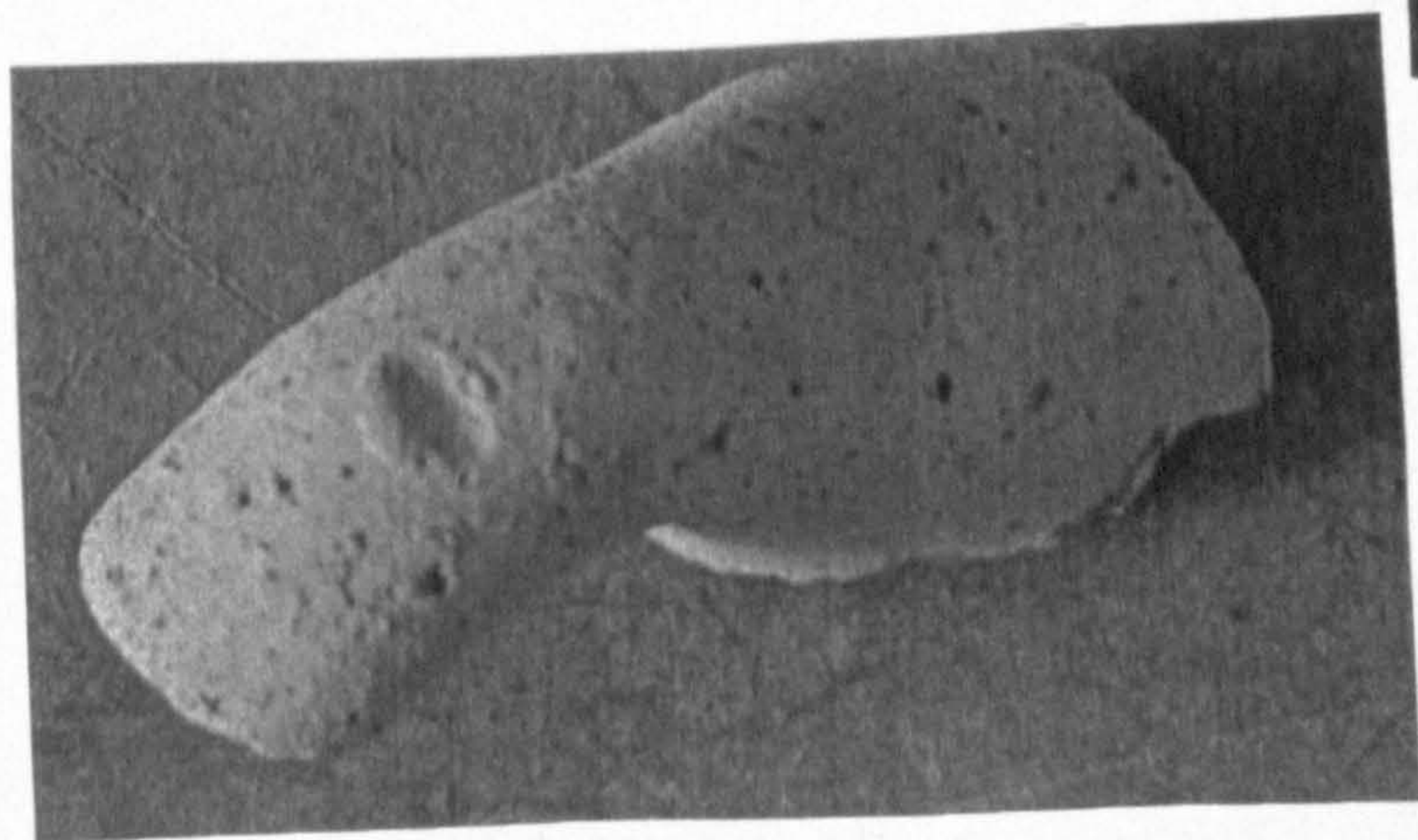
169



170



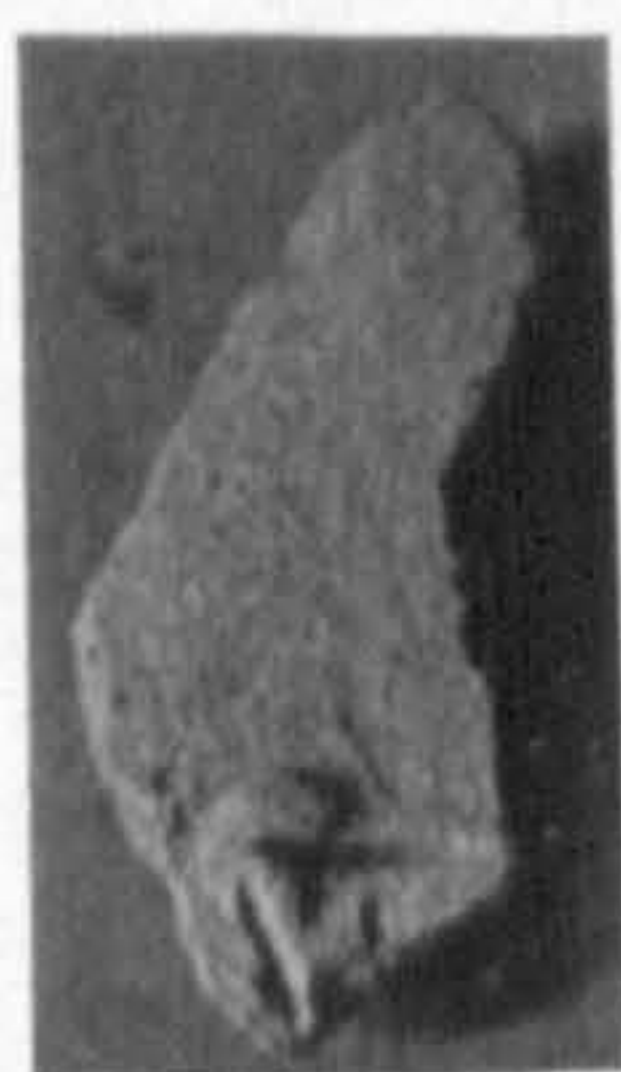
172



173



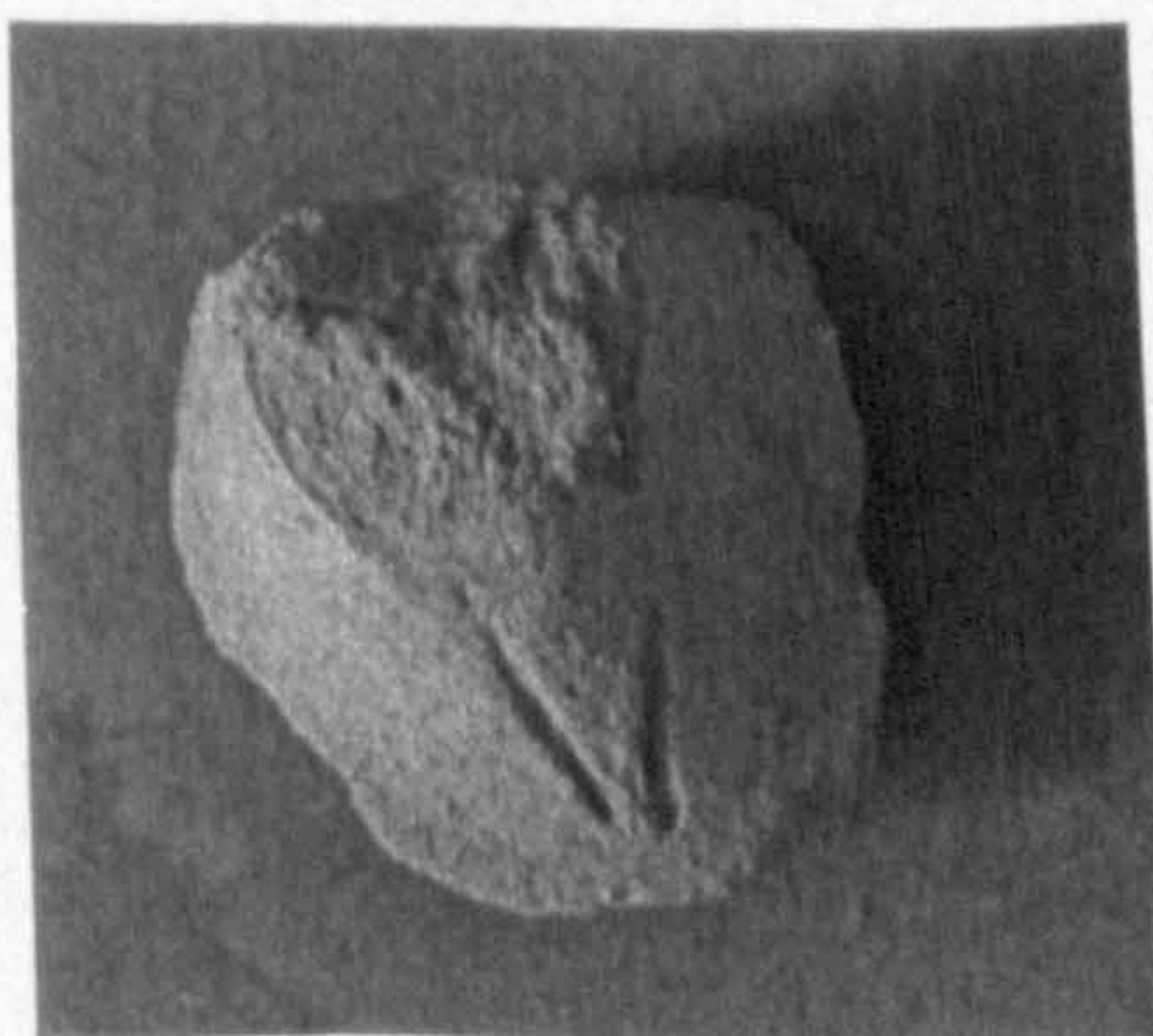
171



174

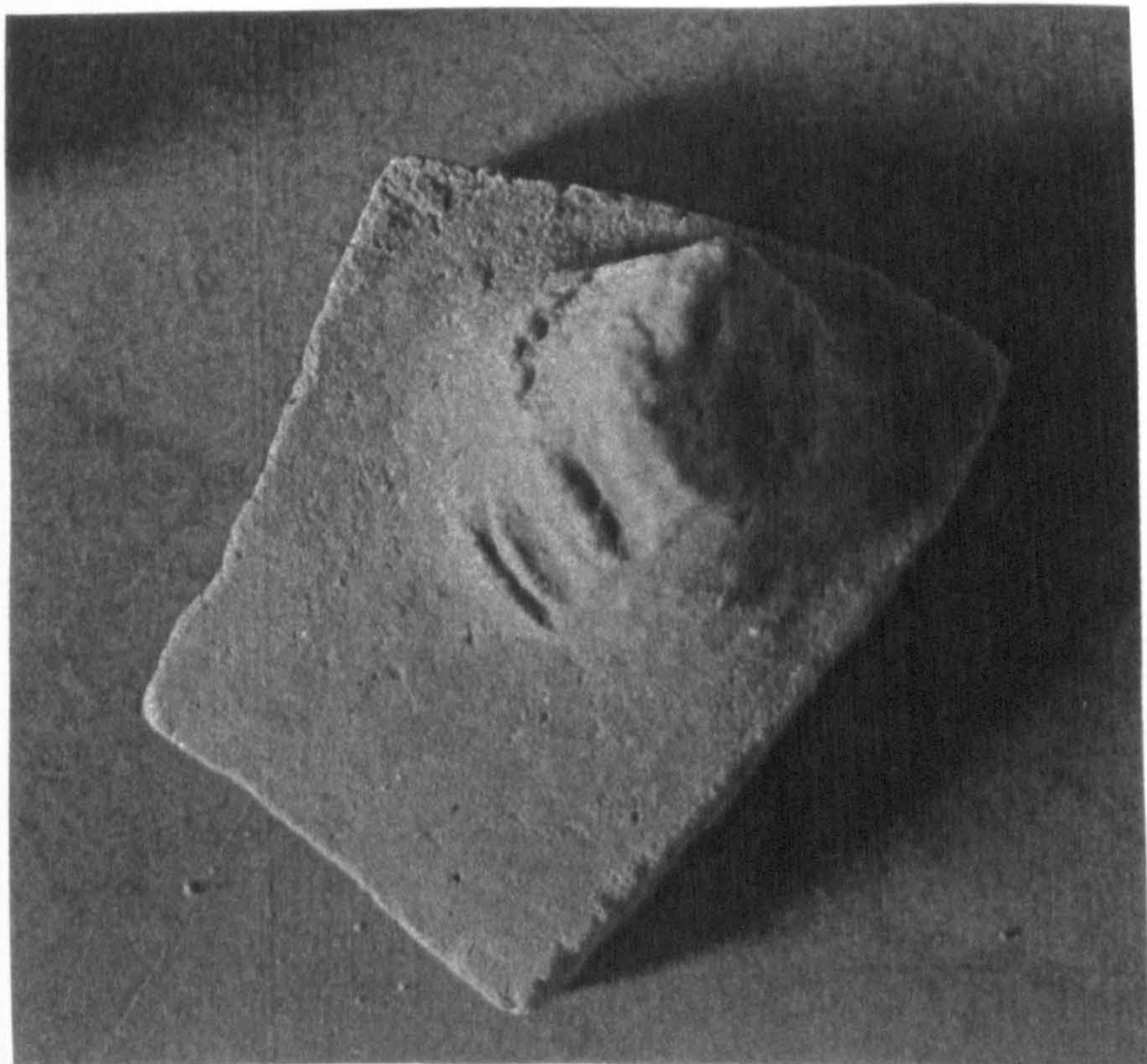


175

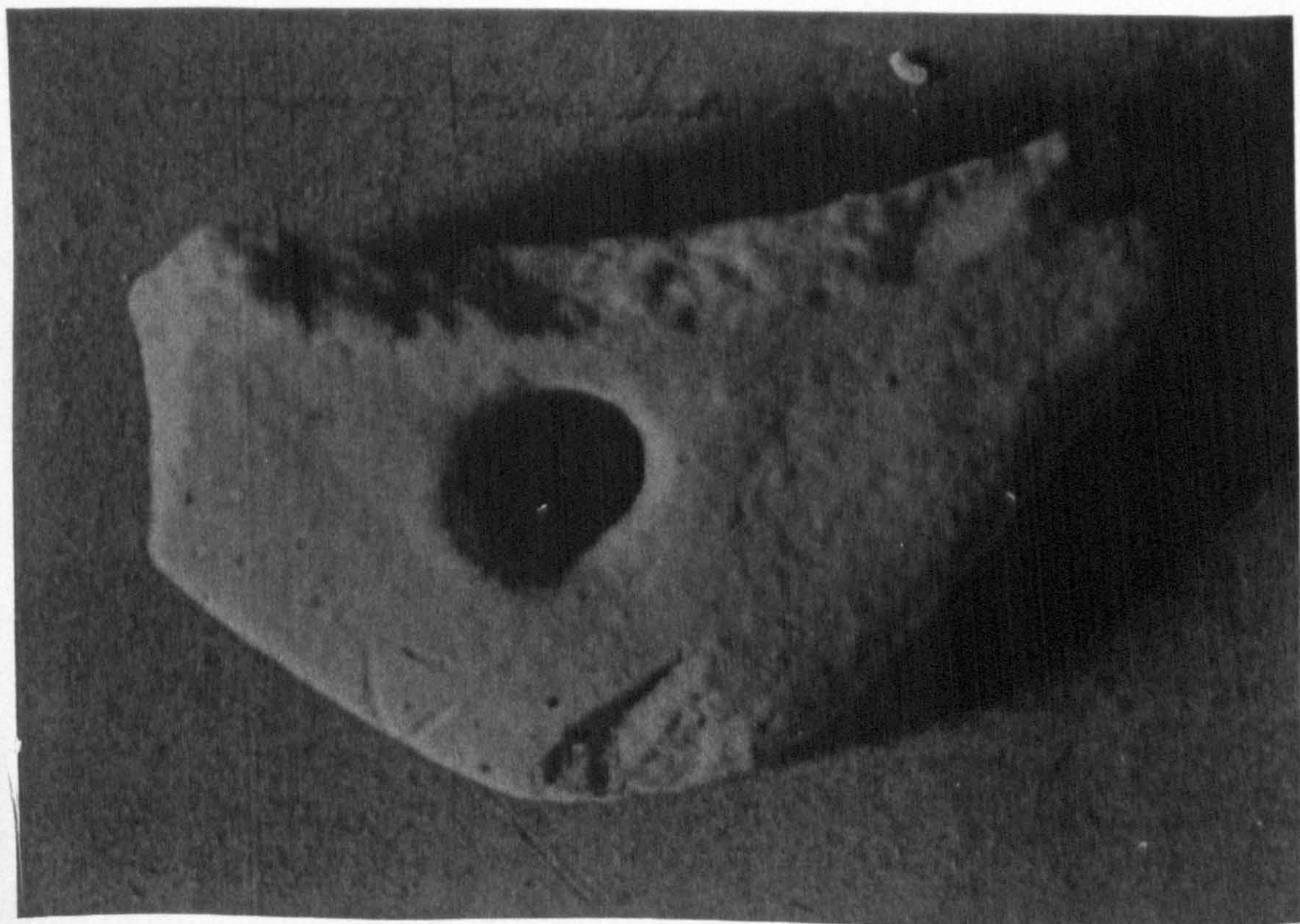


176

XXXVIII. Phylakopi 1974-77 169-176. Various scales

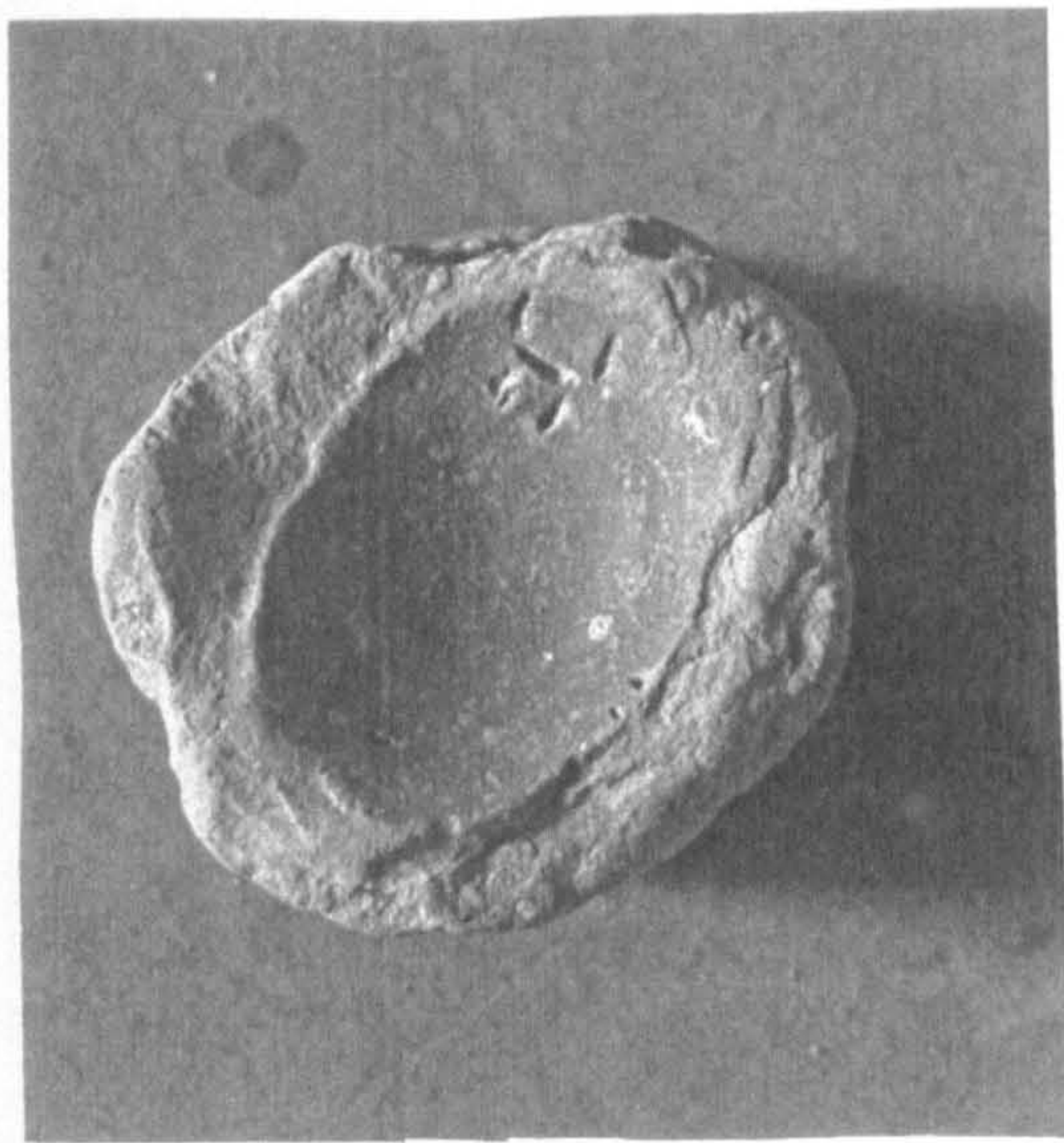


178

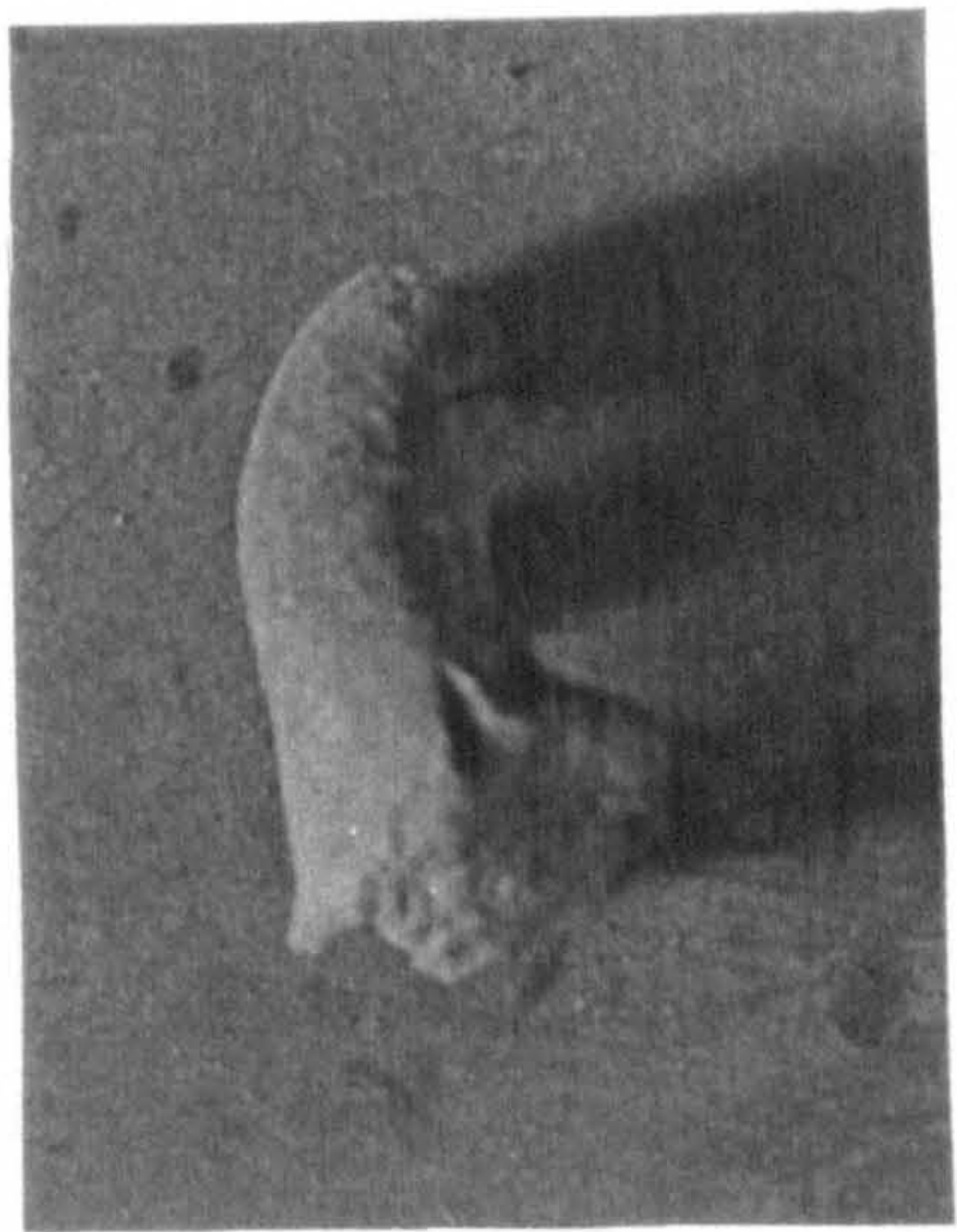


179

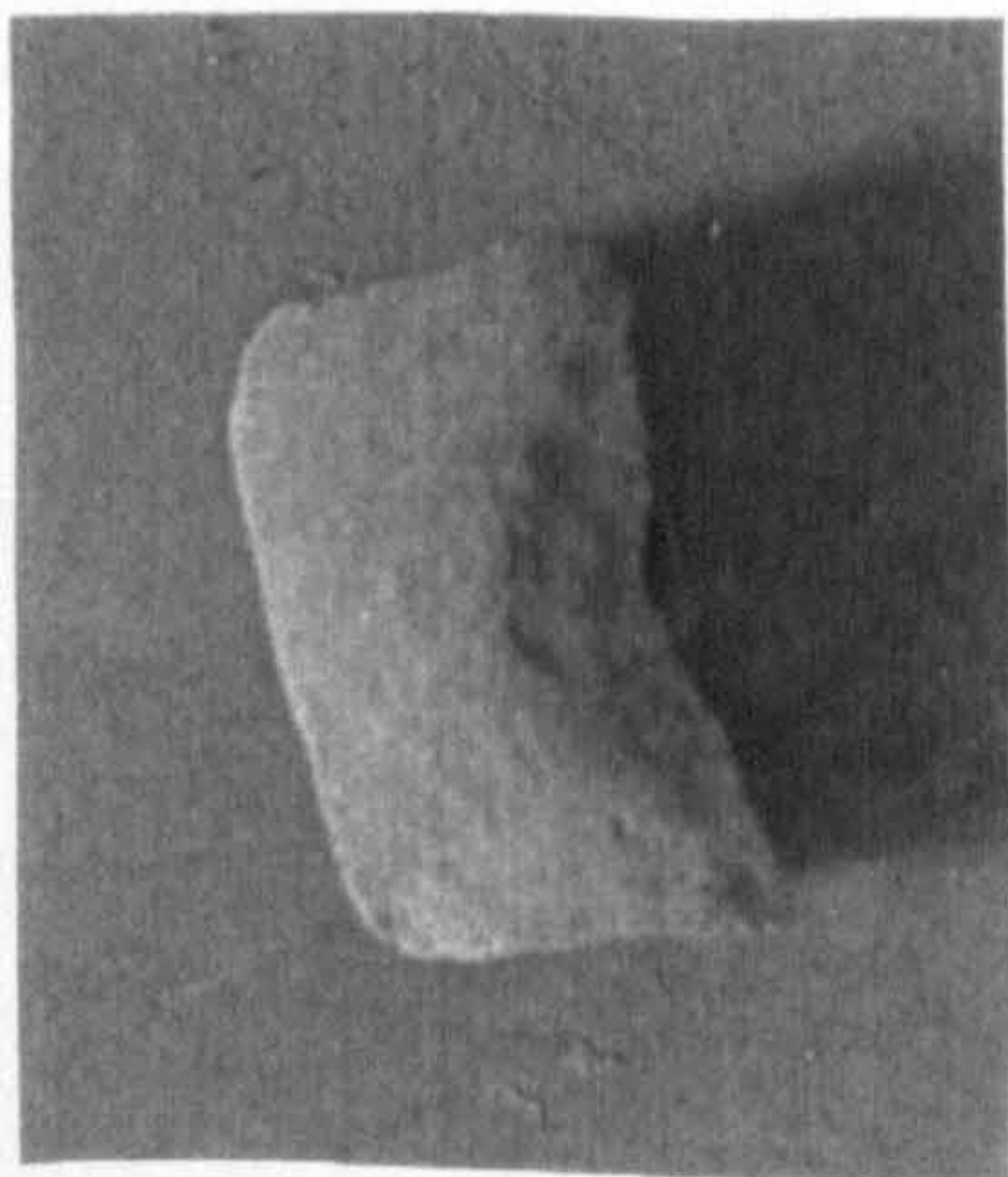
XXXIX. Phylakopi 1974-77 178,179. Various scales



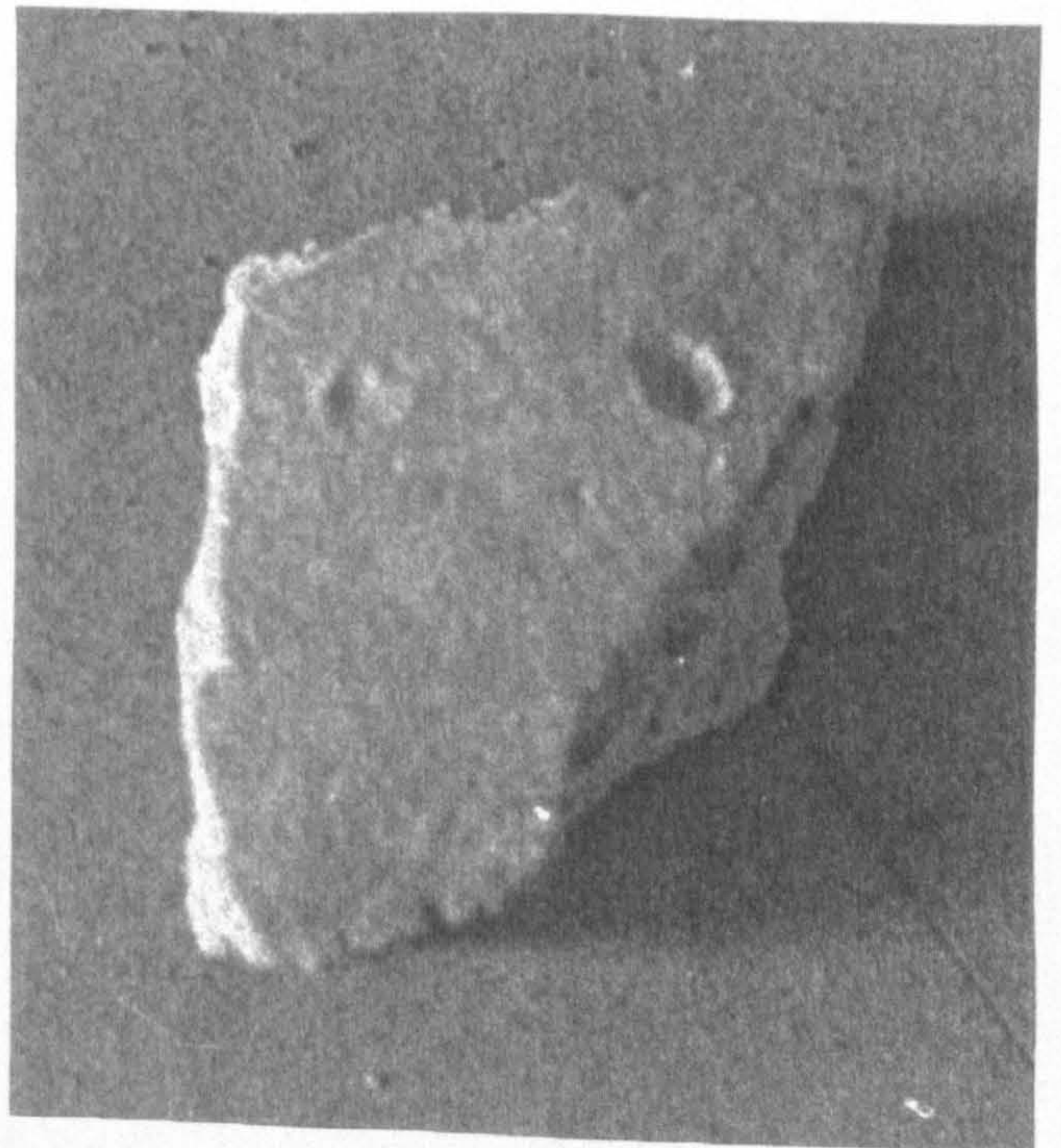
180



181

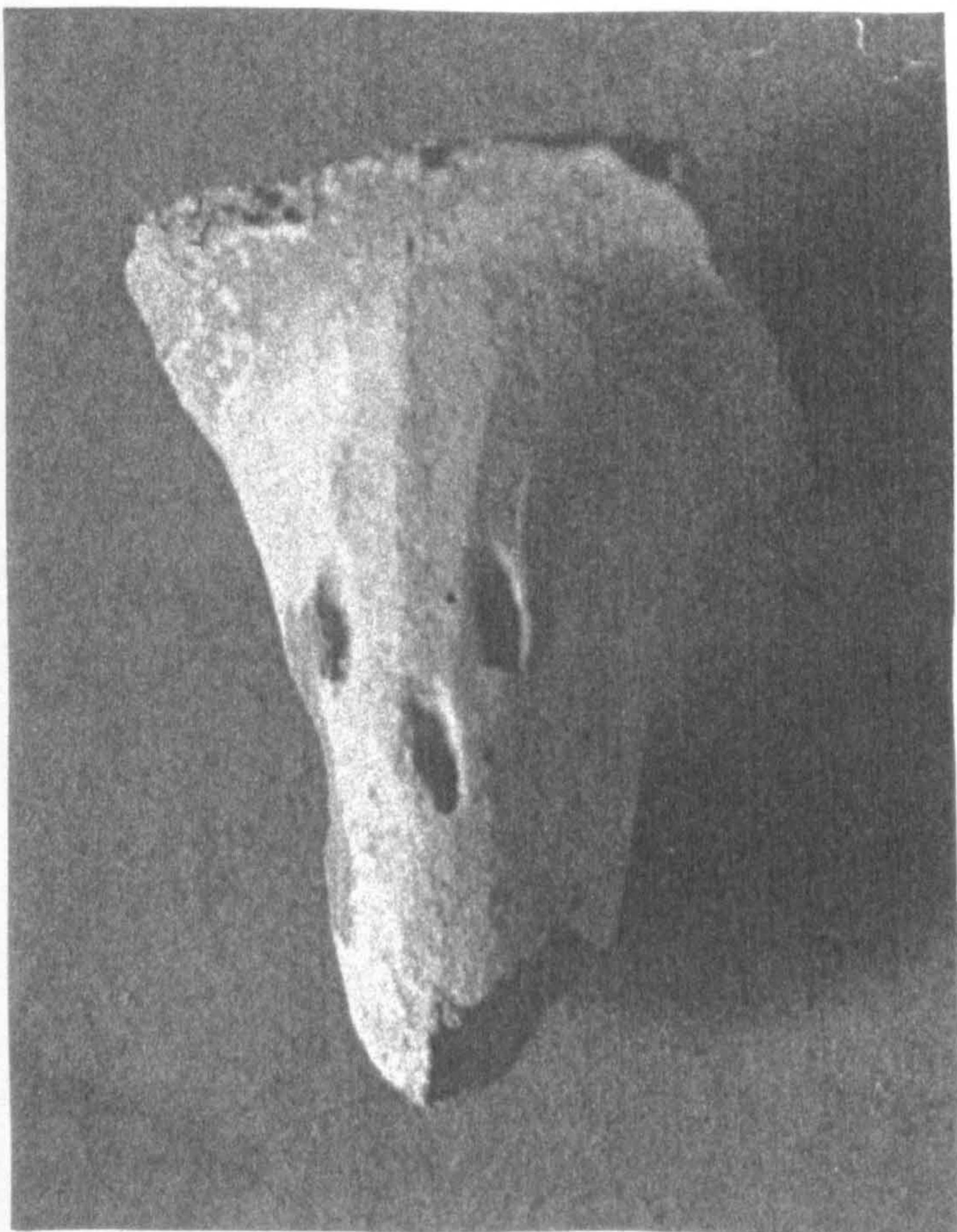


182

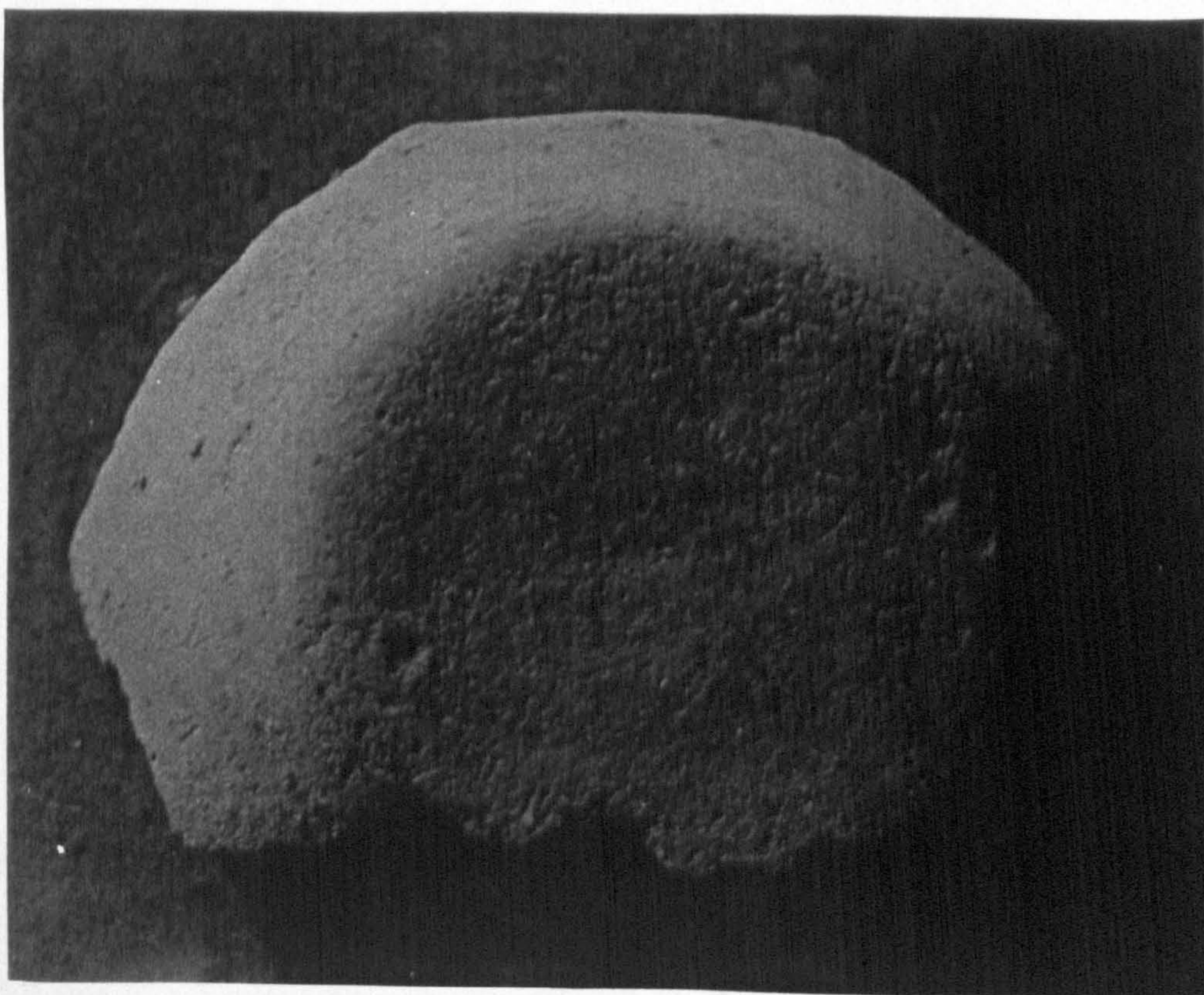


183

XL. Phylakopi 1974-77 180-183. Various scales

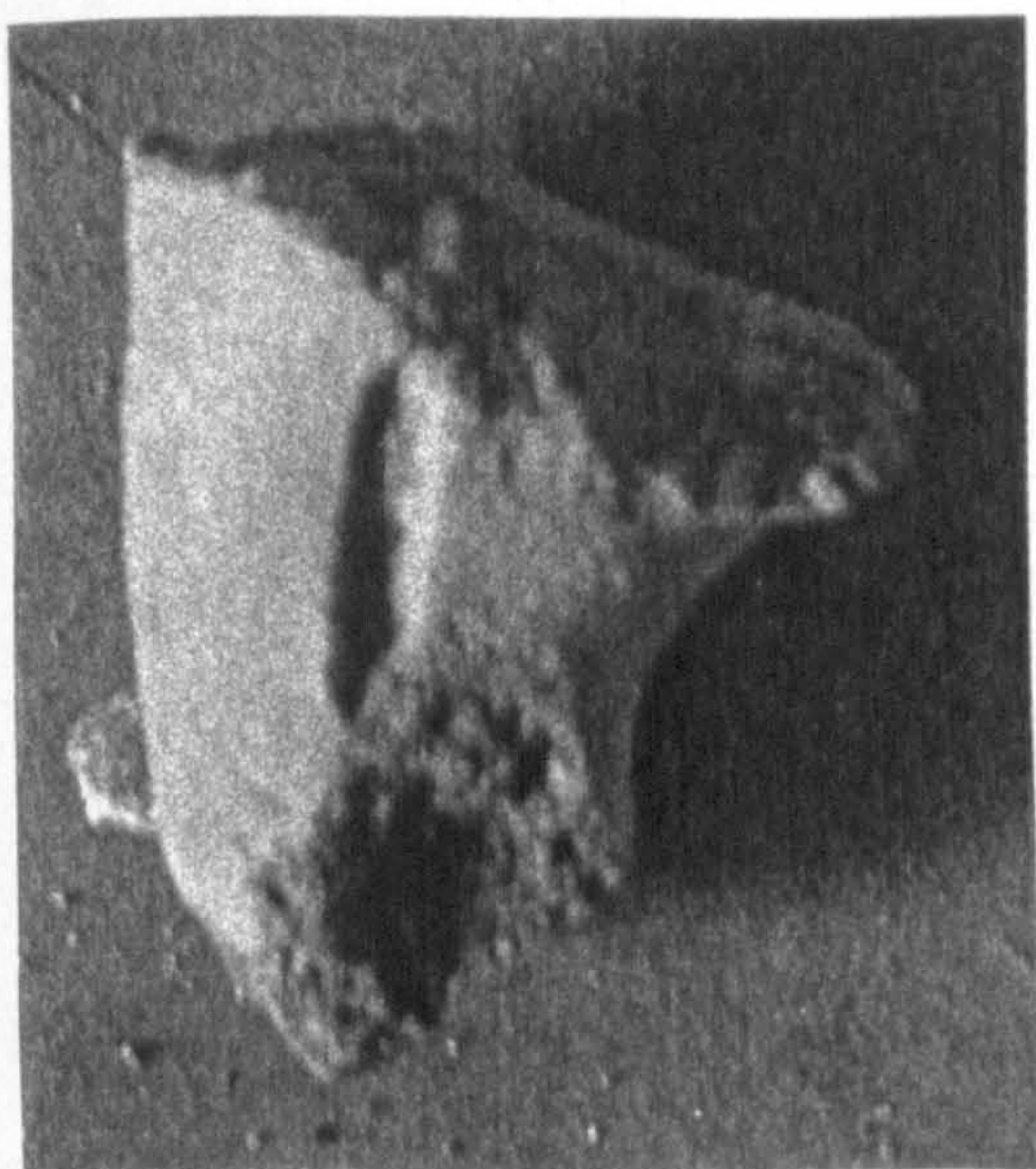


184

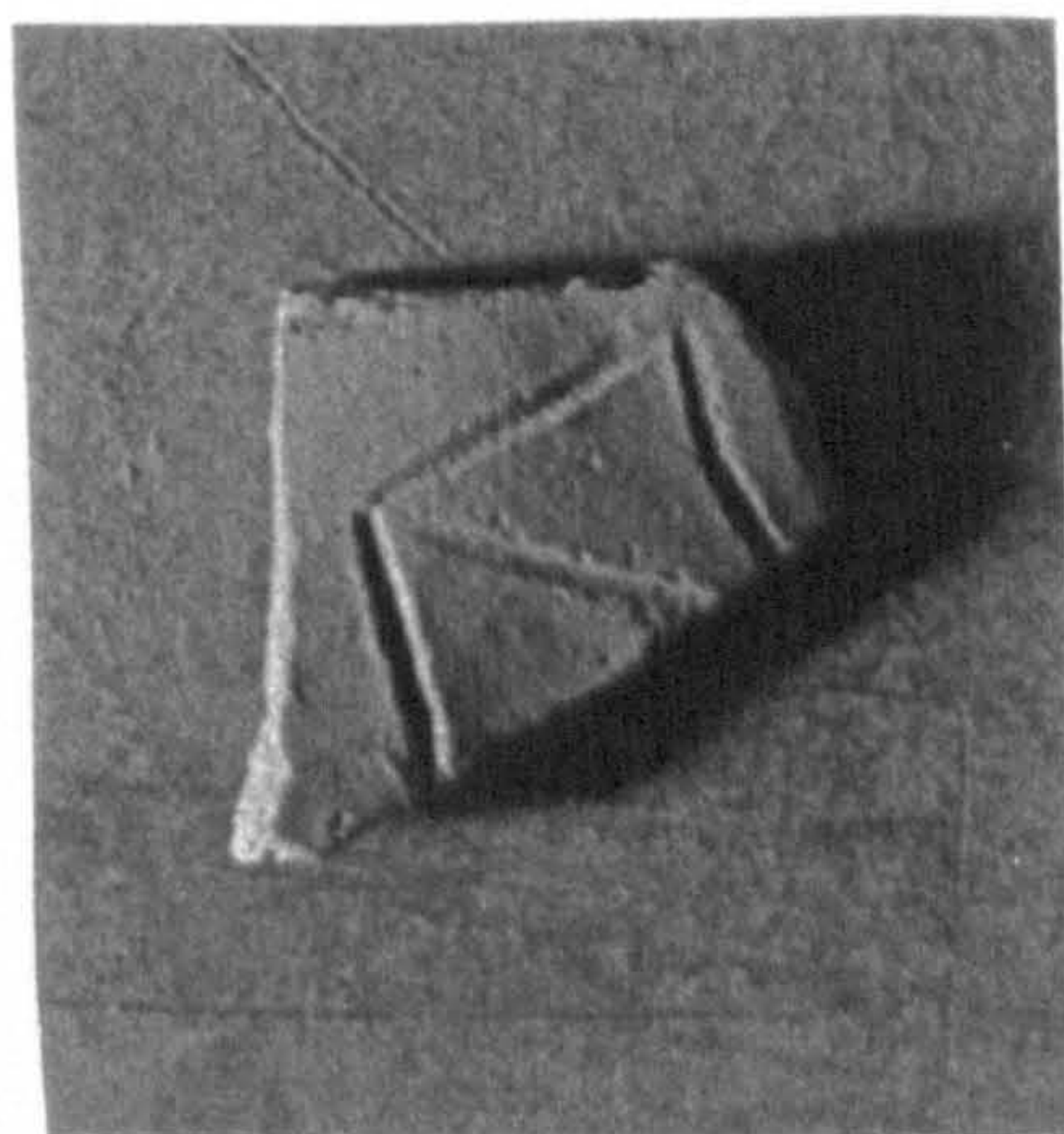


185

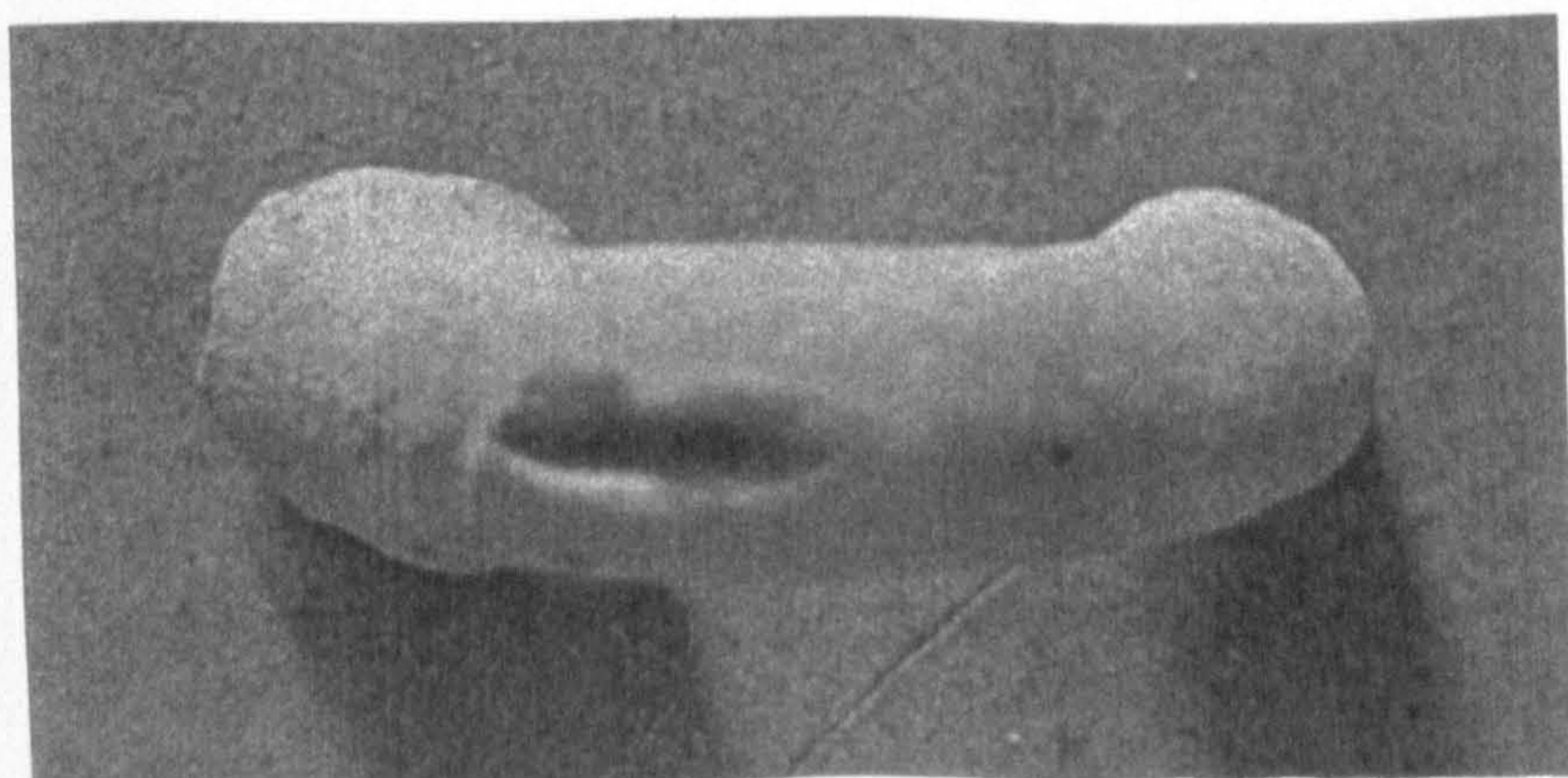
XLI. Phylakopi 1974-77 184,185. Various scales



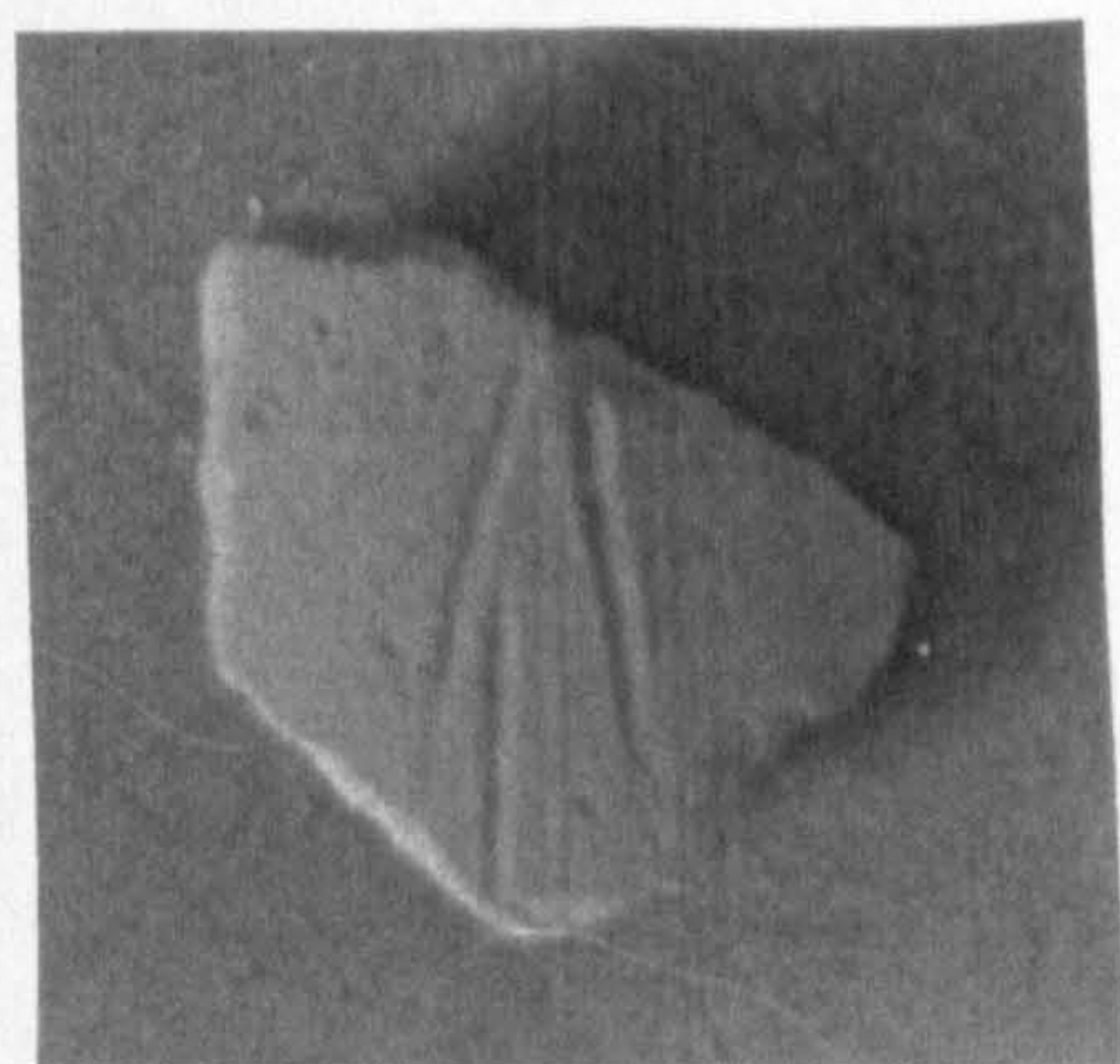
186



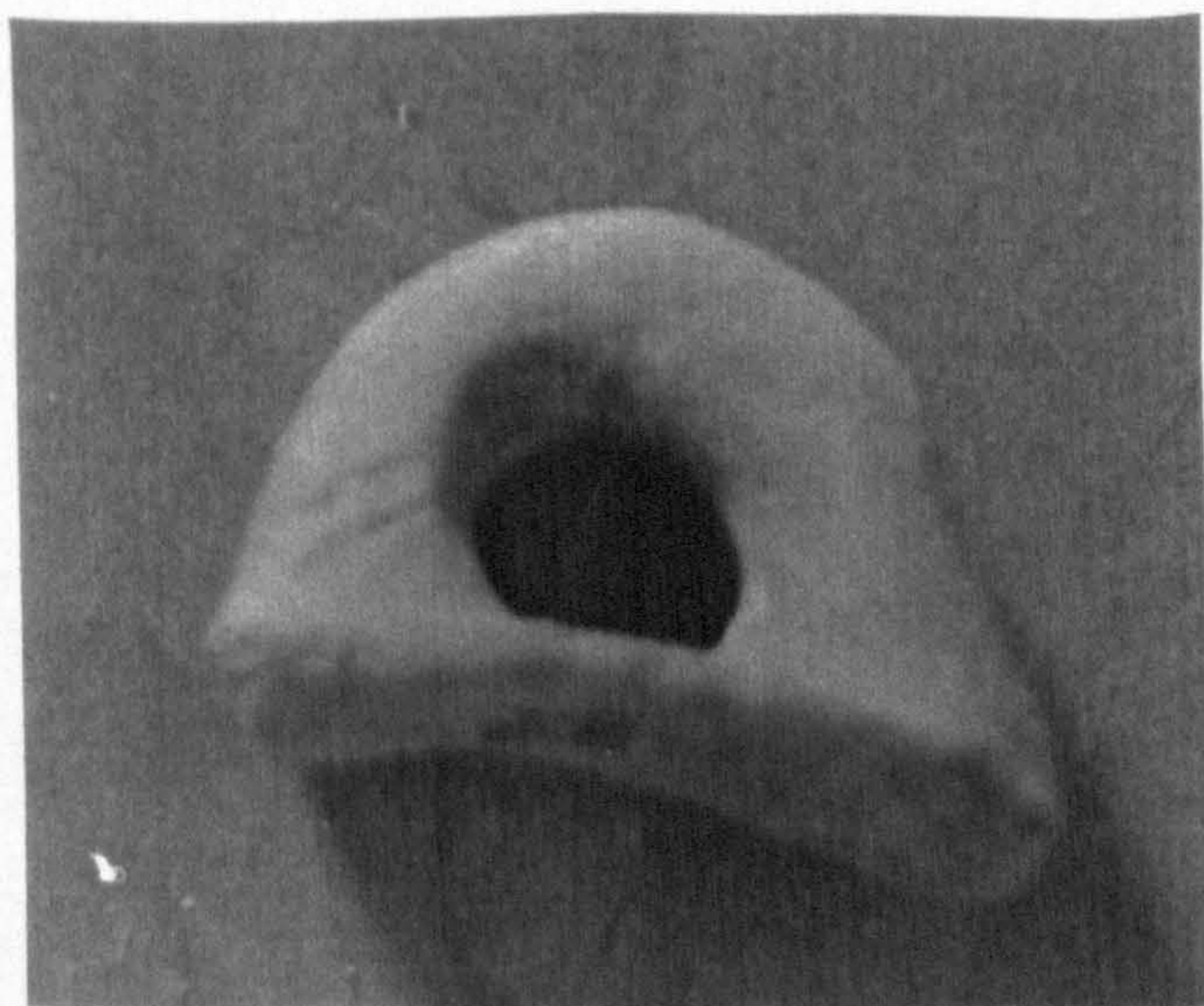
187



188

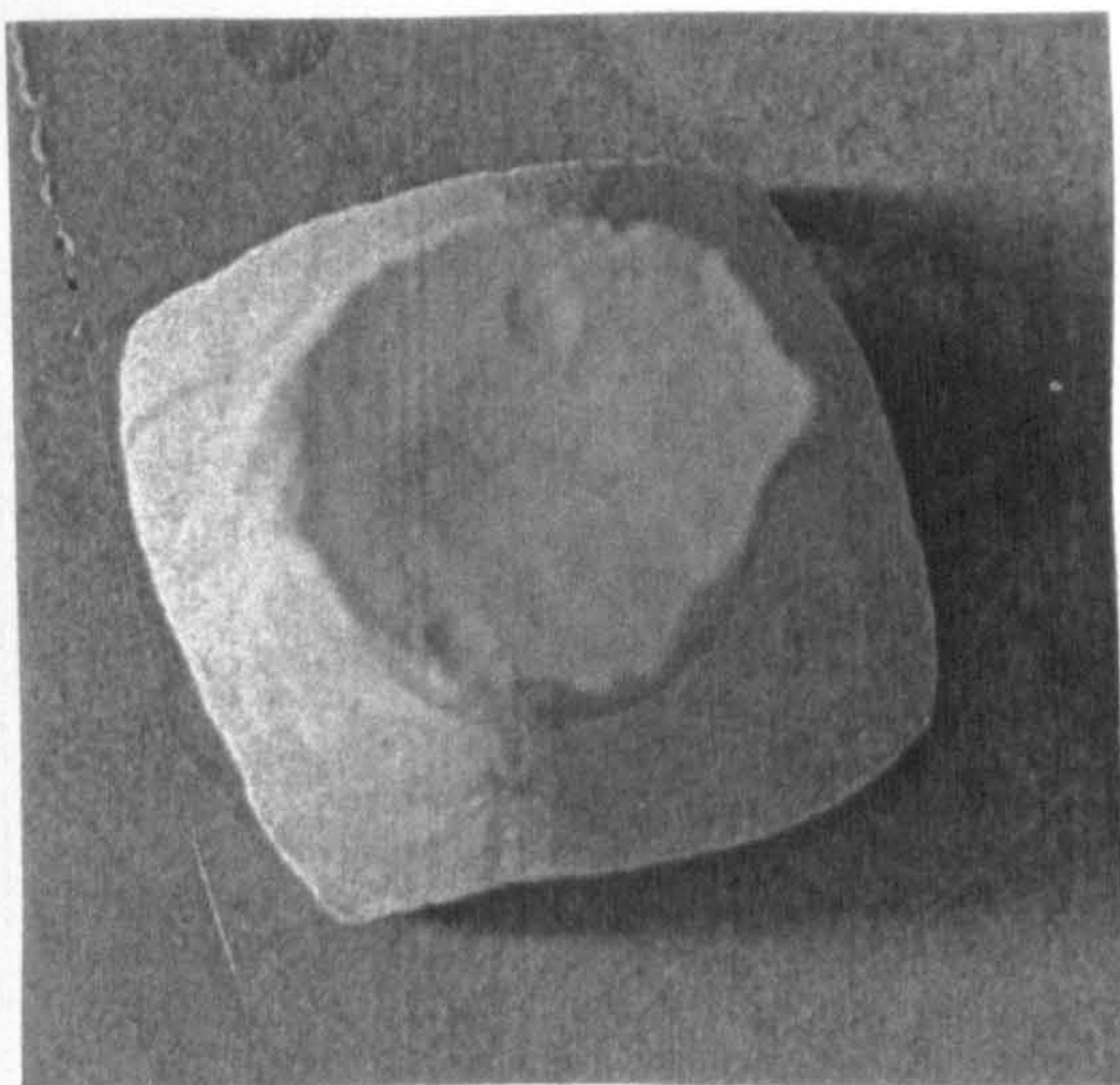


189

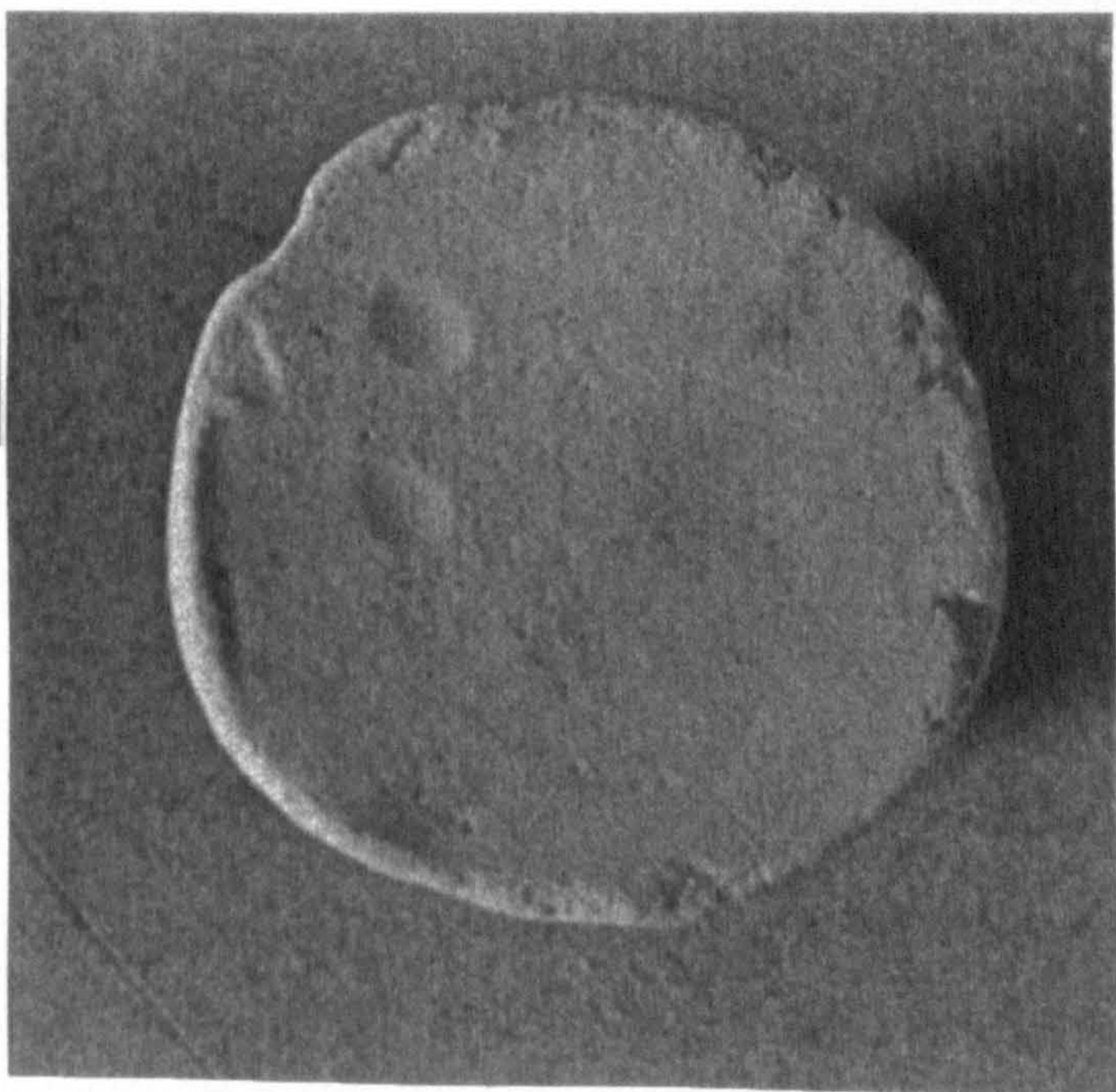


190

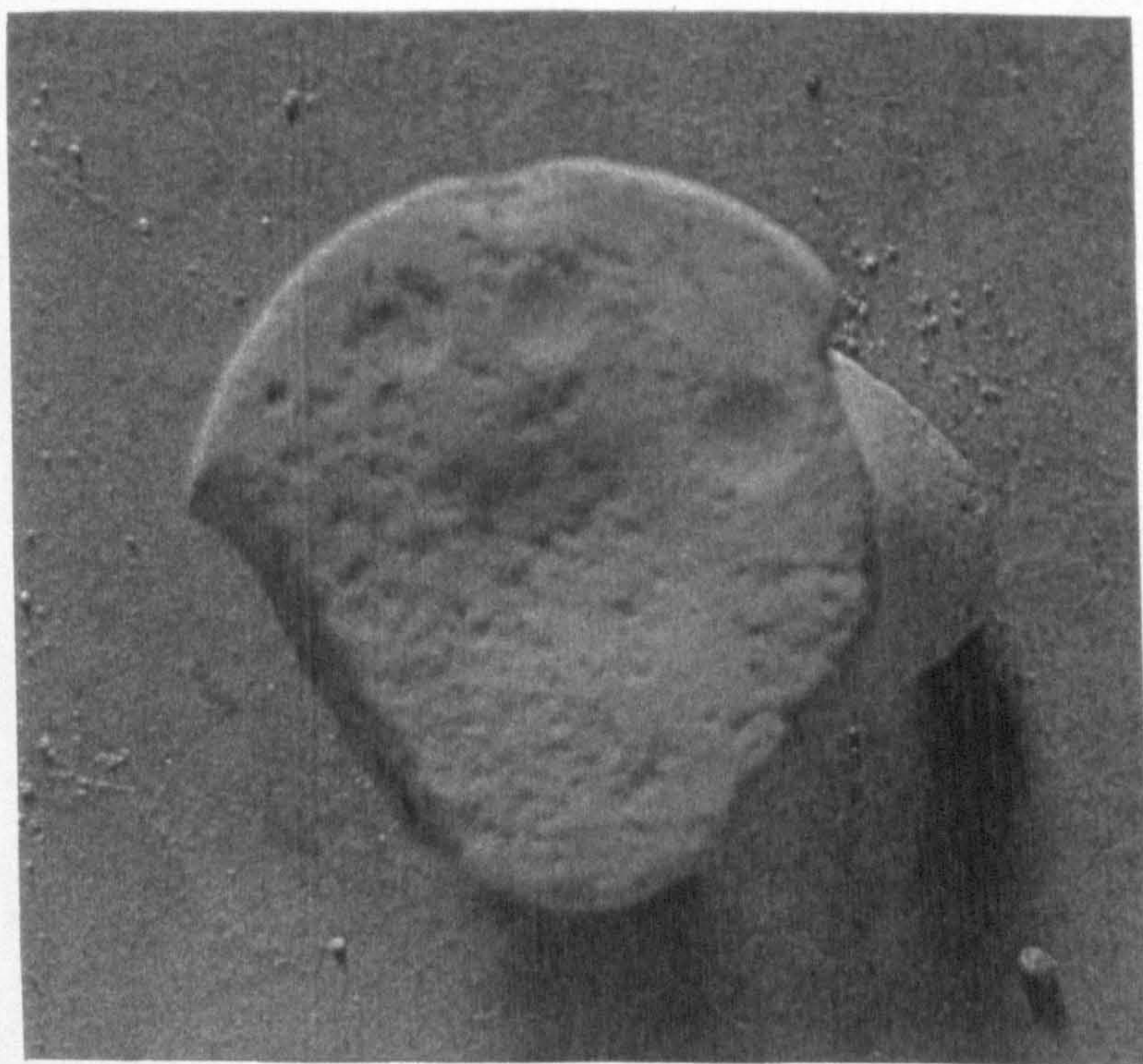
XLII. Phylakopi 1974-77 186-190. Various scales



191

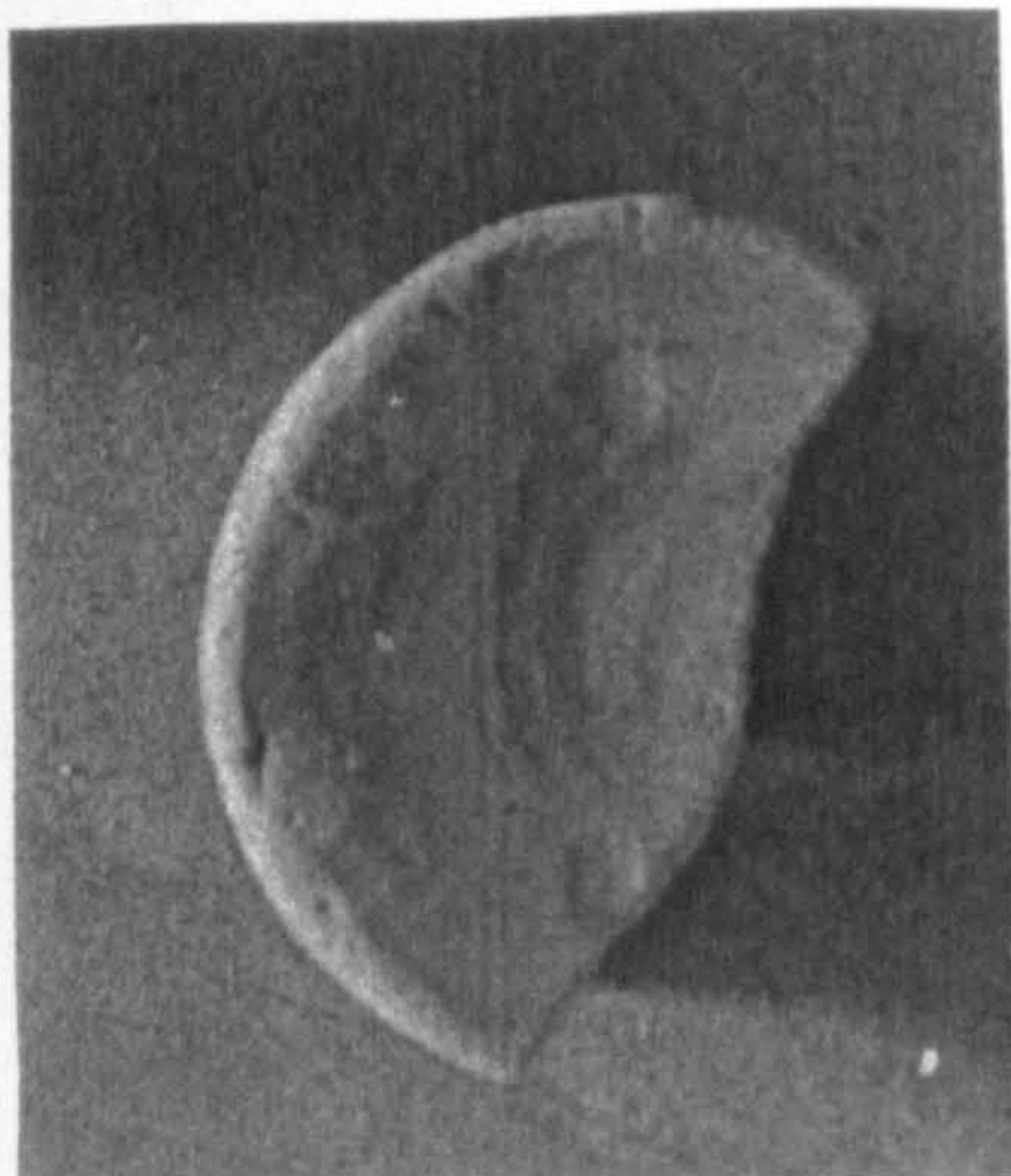


193

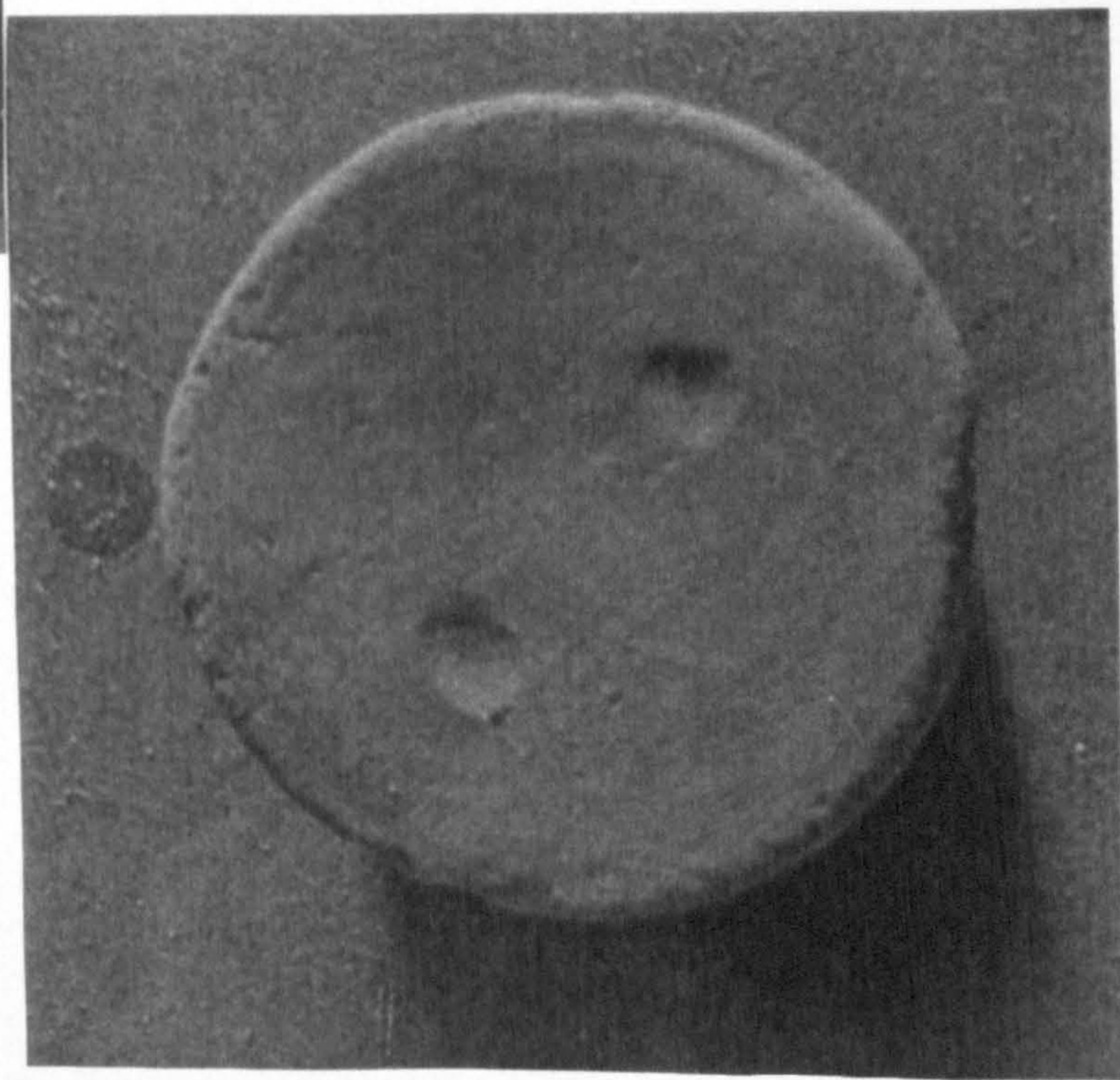


192

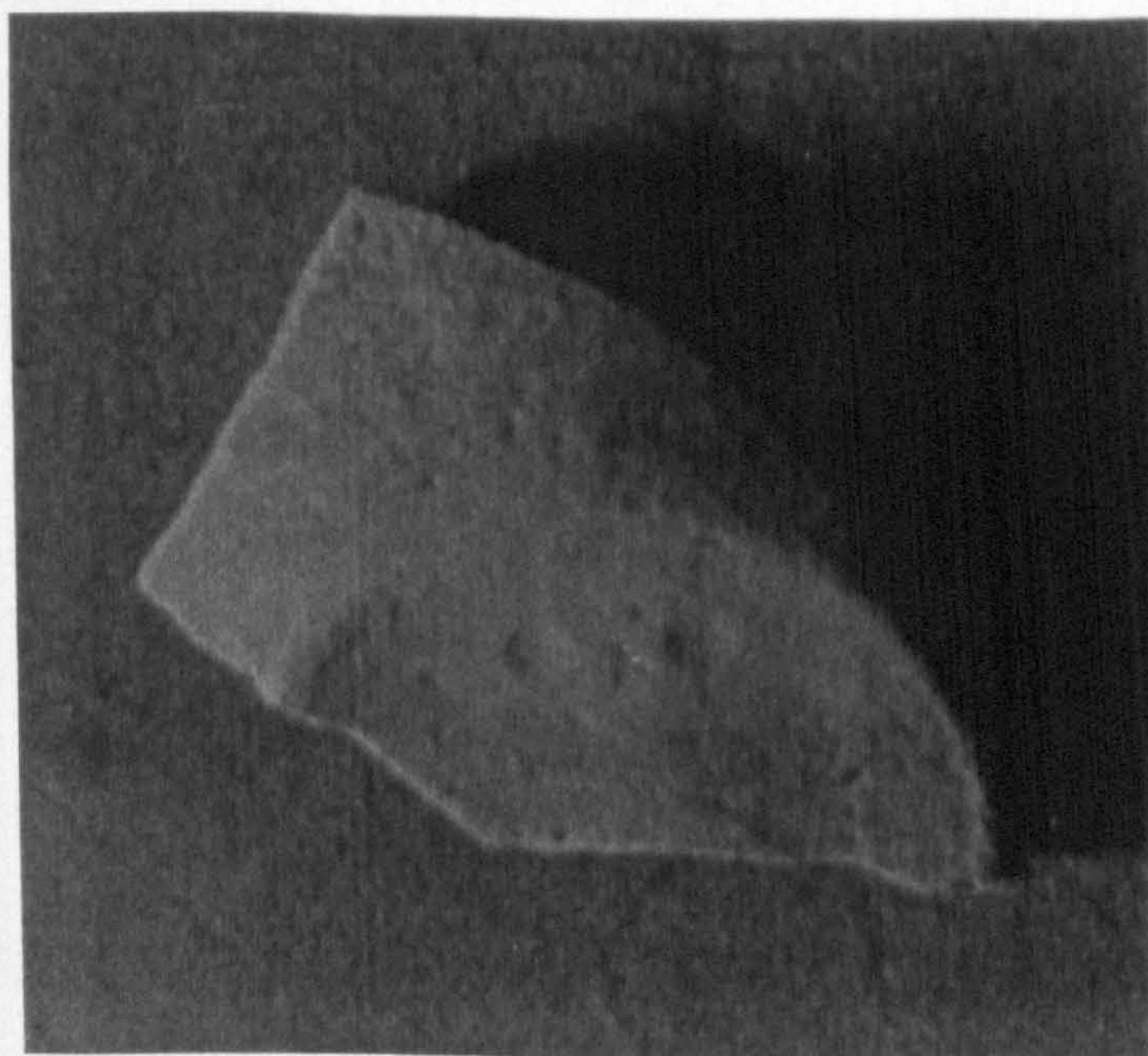
XLIII. Phylakopi 1974-77 191-193. Various scales



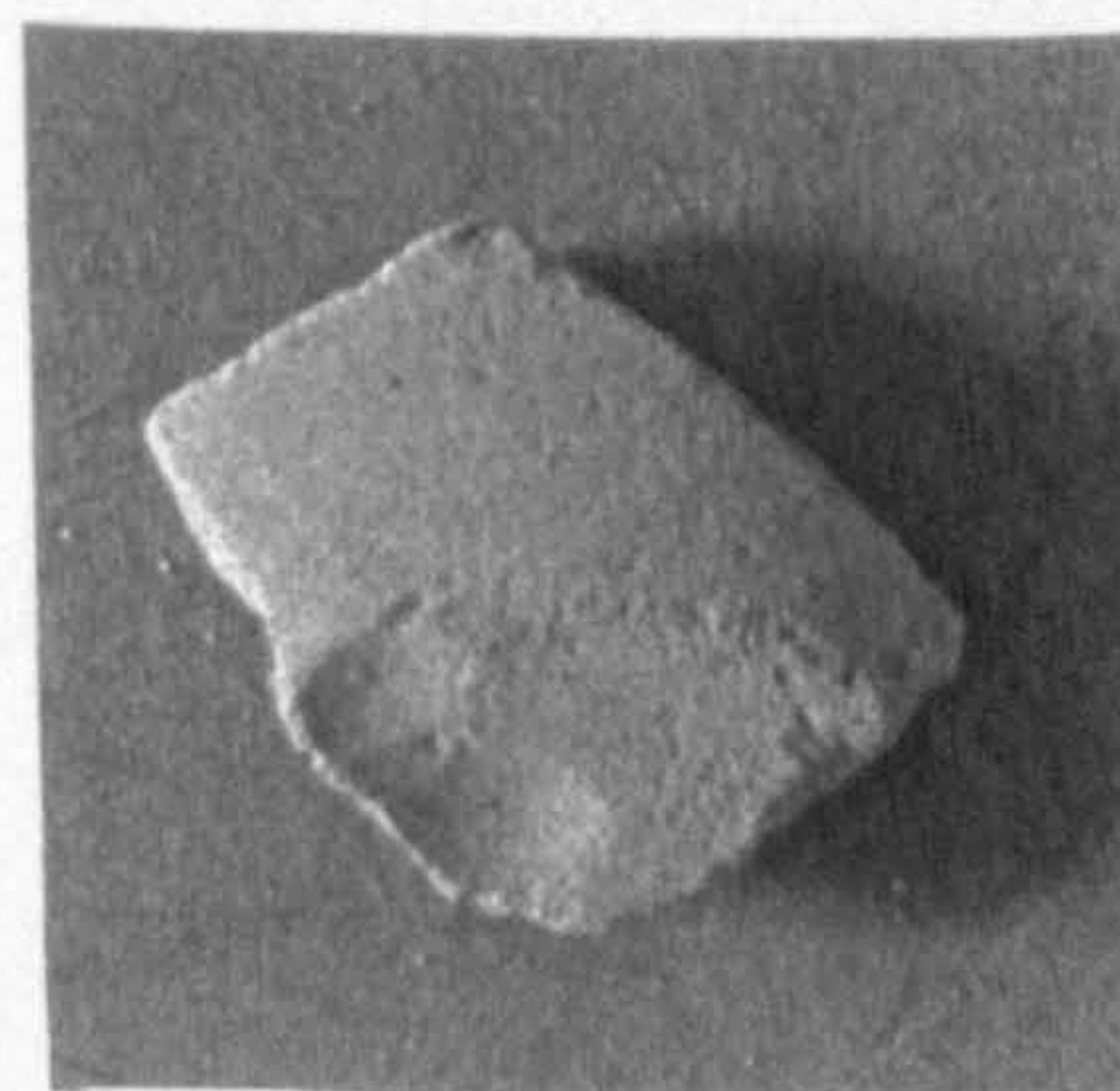
194



195

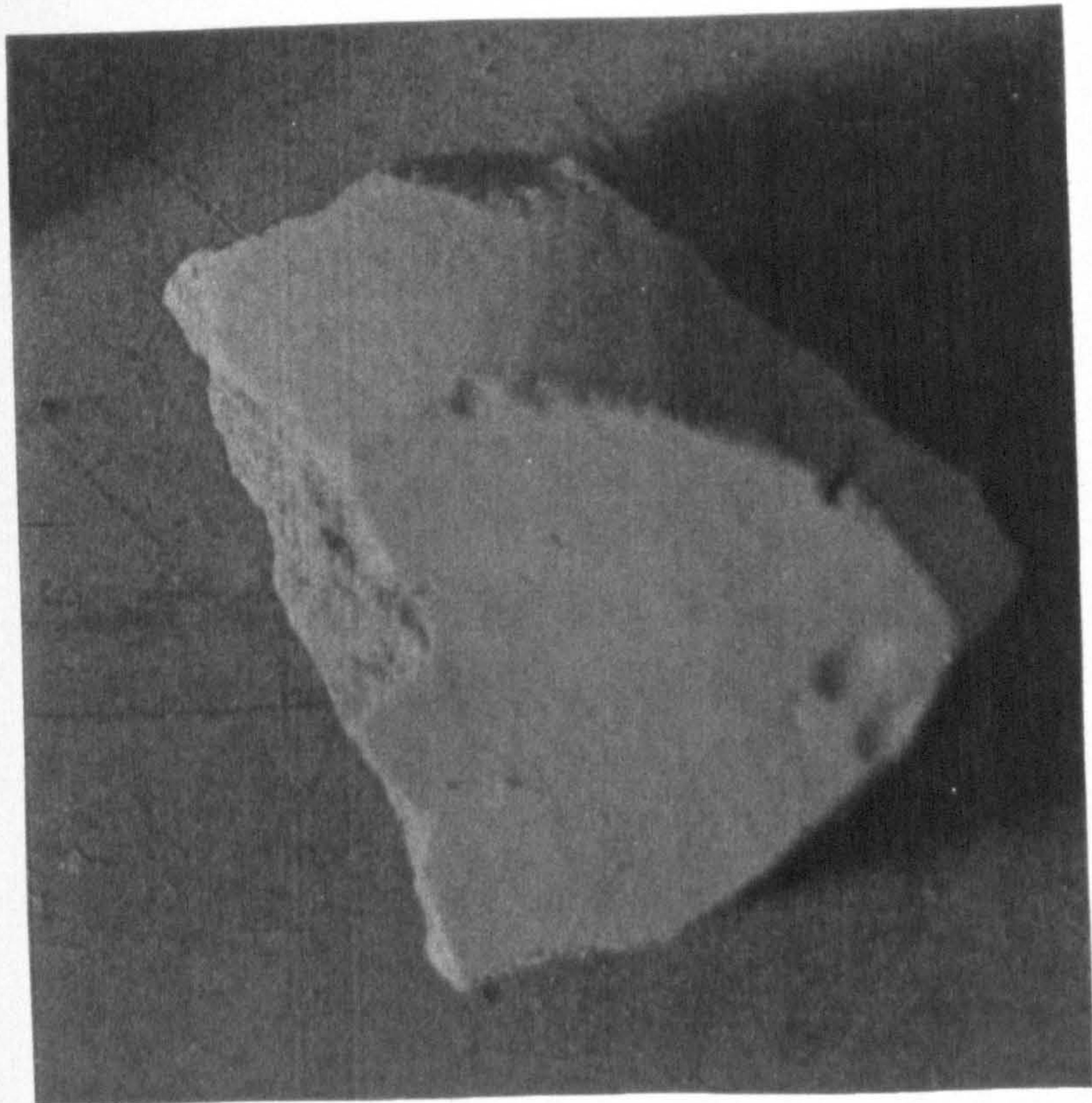


196

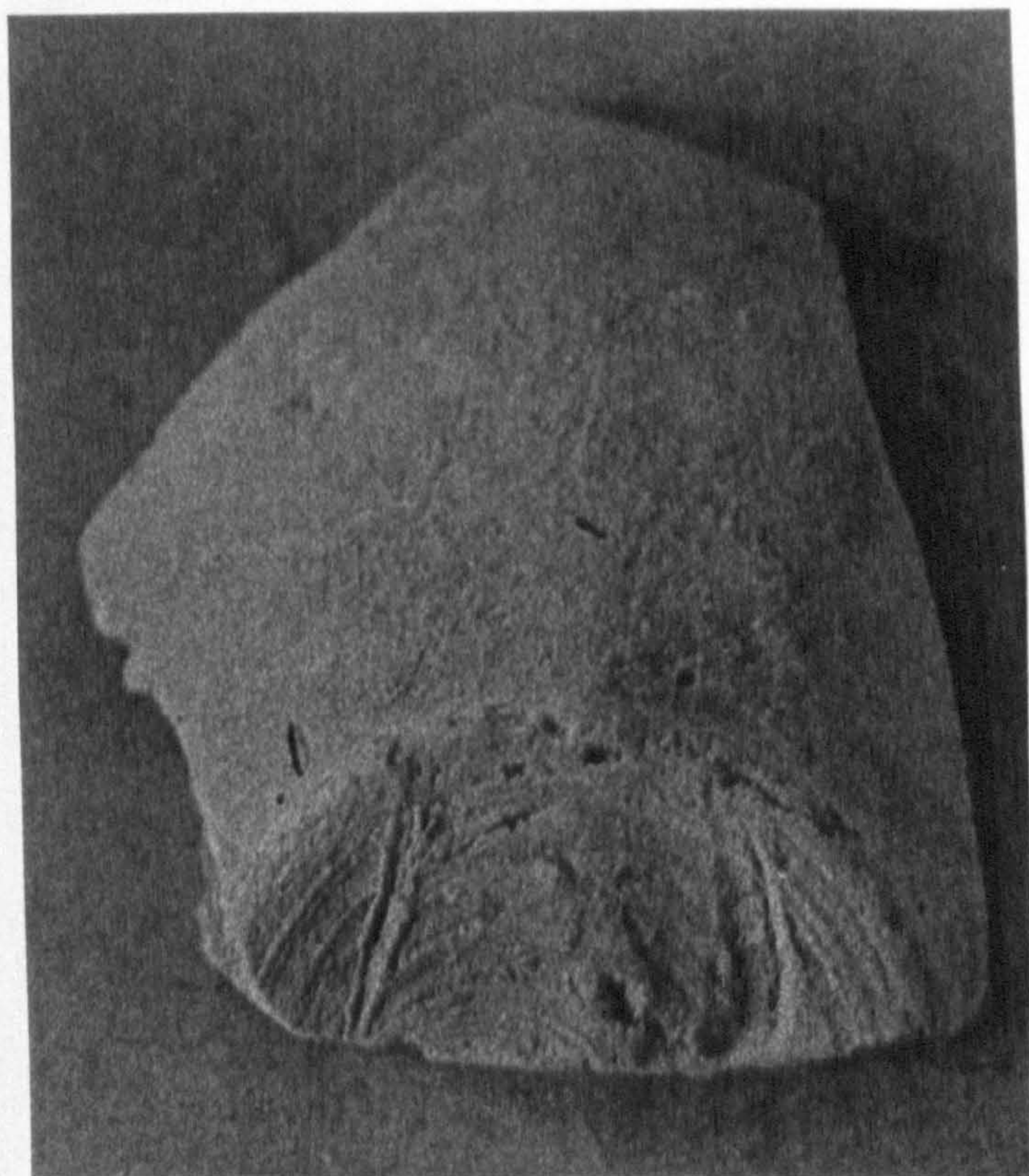


197

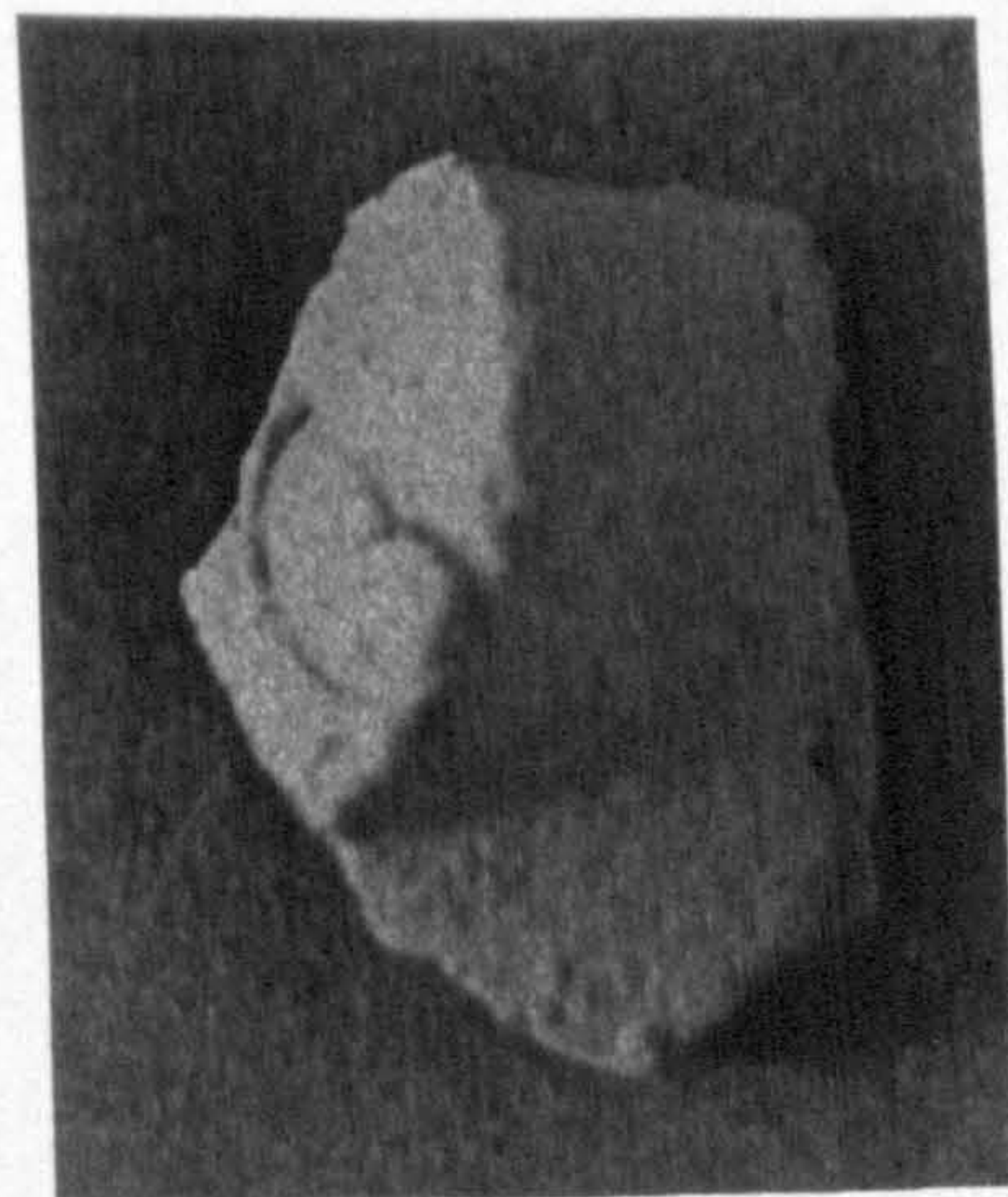
XLIV. Phylakopi 1974-77 194-197. Various scales



198

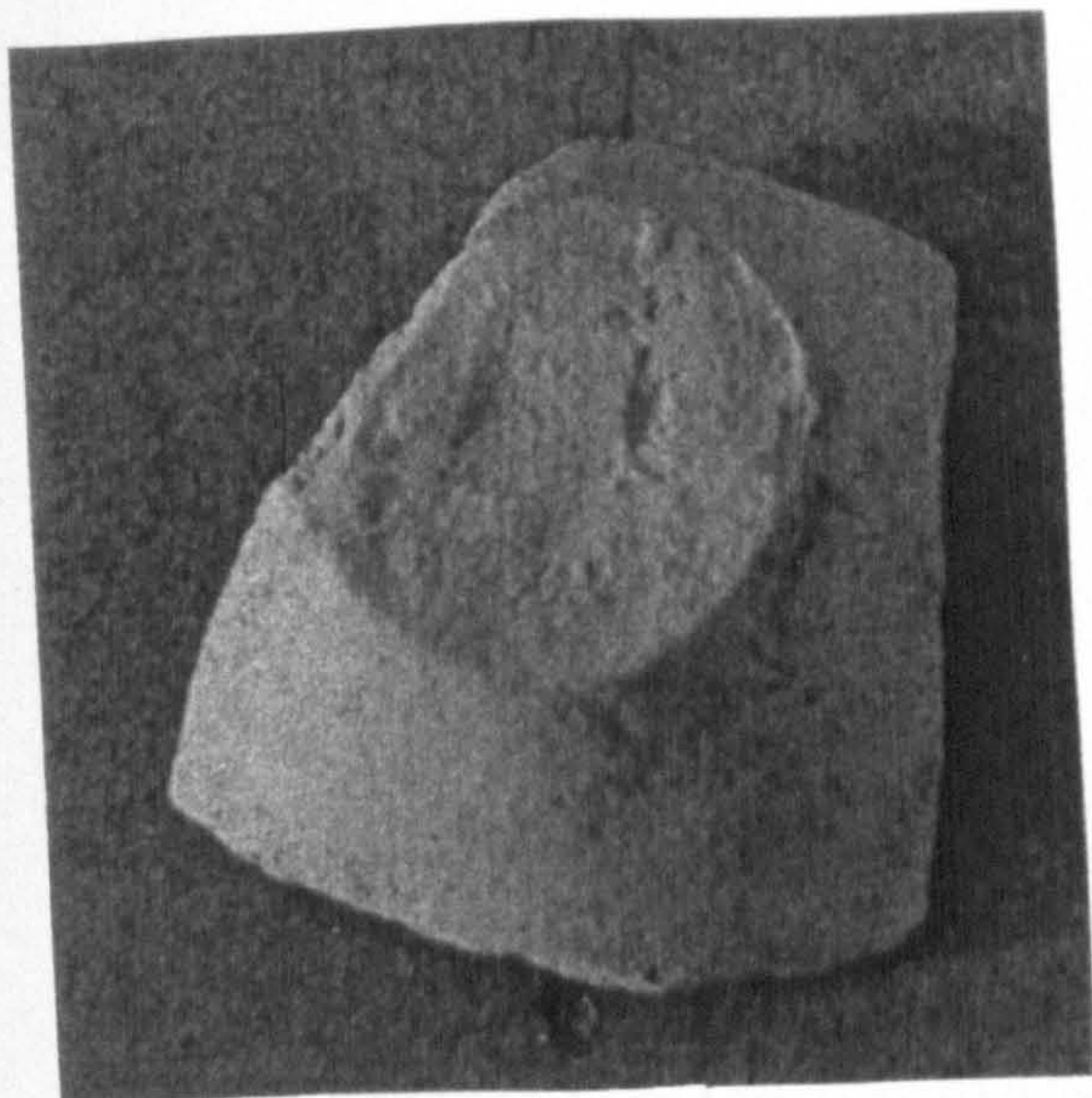


199



200

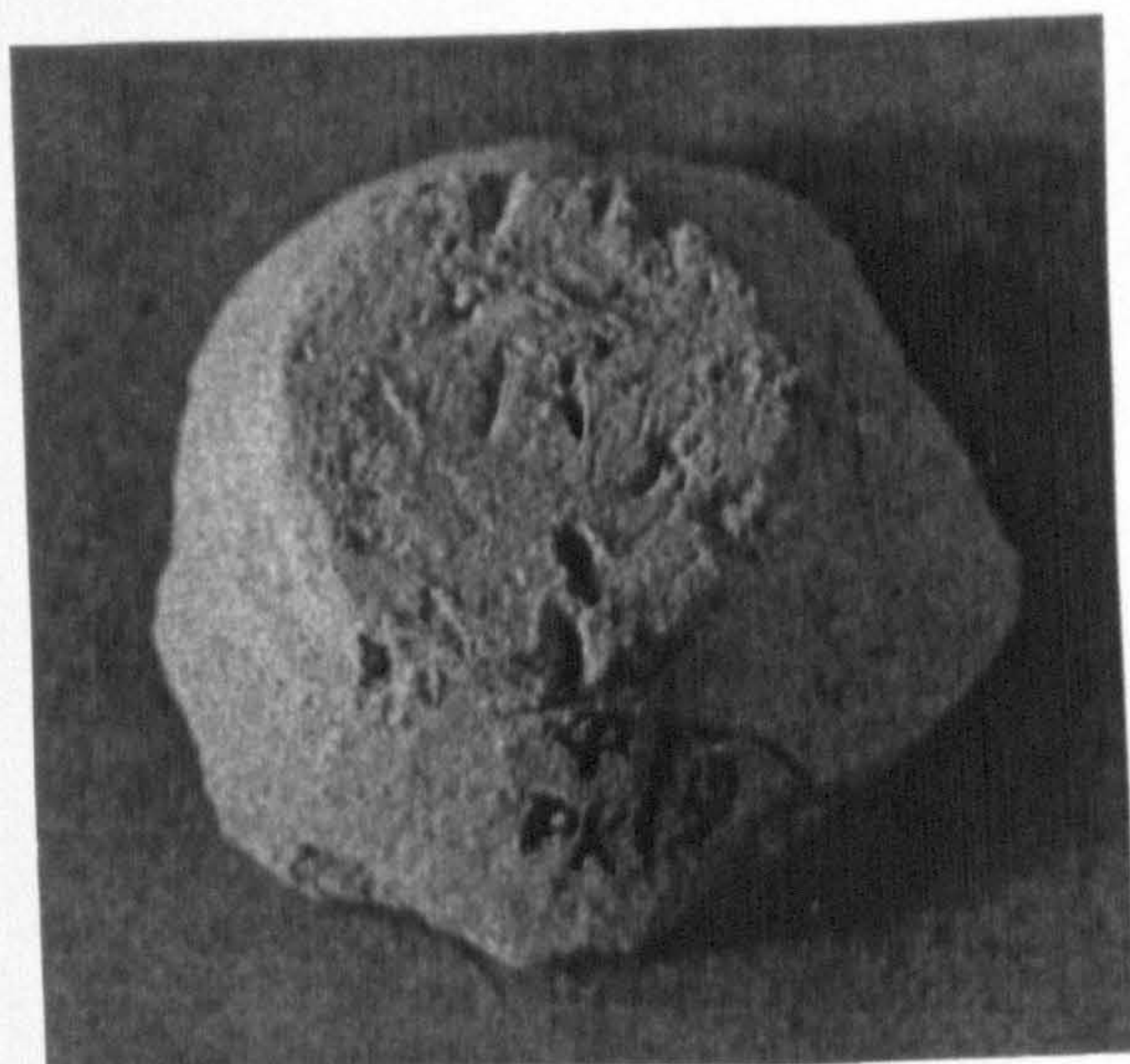
XLV. Phylakopi 1974-77 198-200. Various scales



201



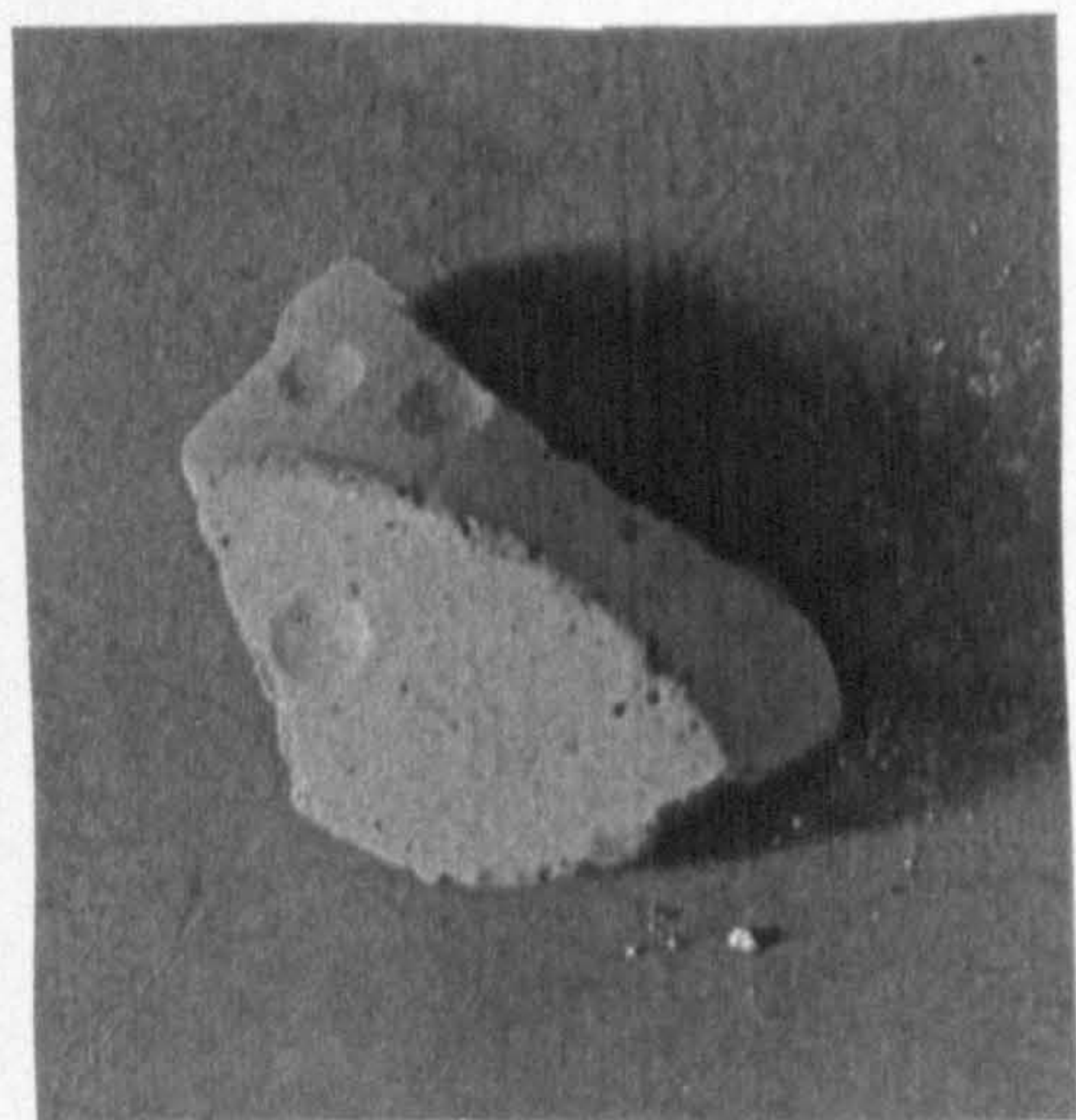
202



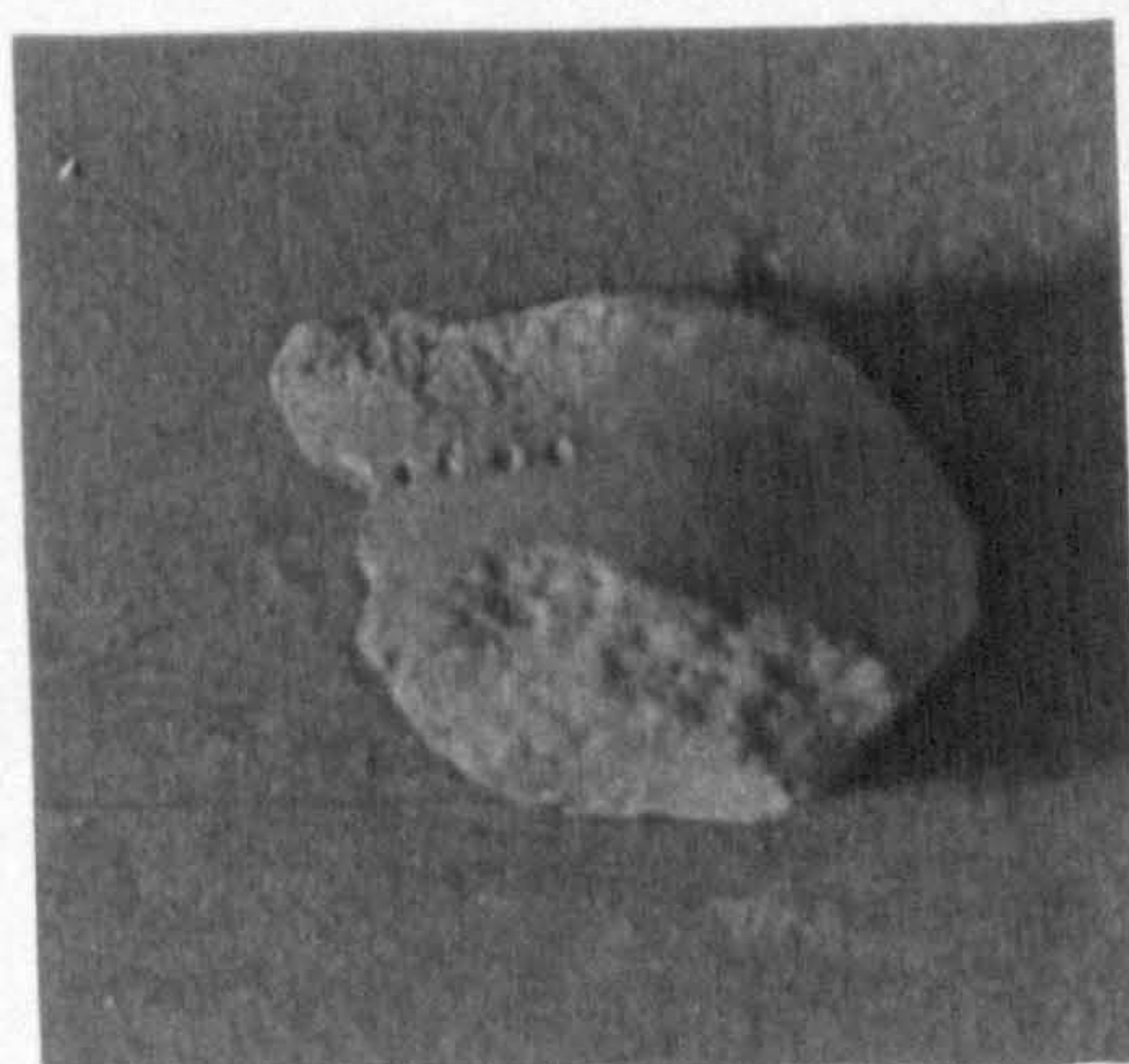
203



204

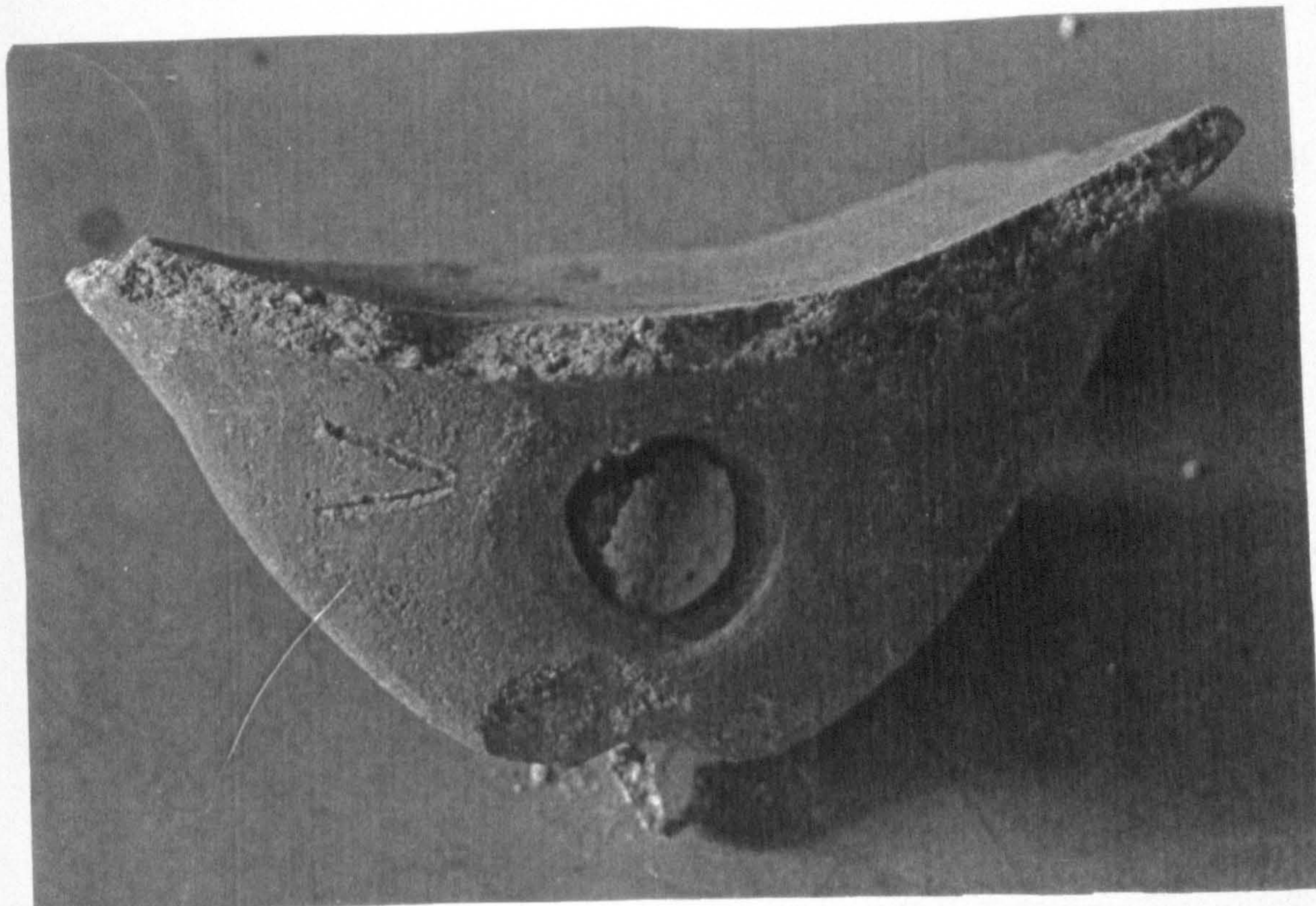


205



206

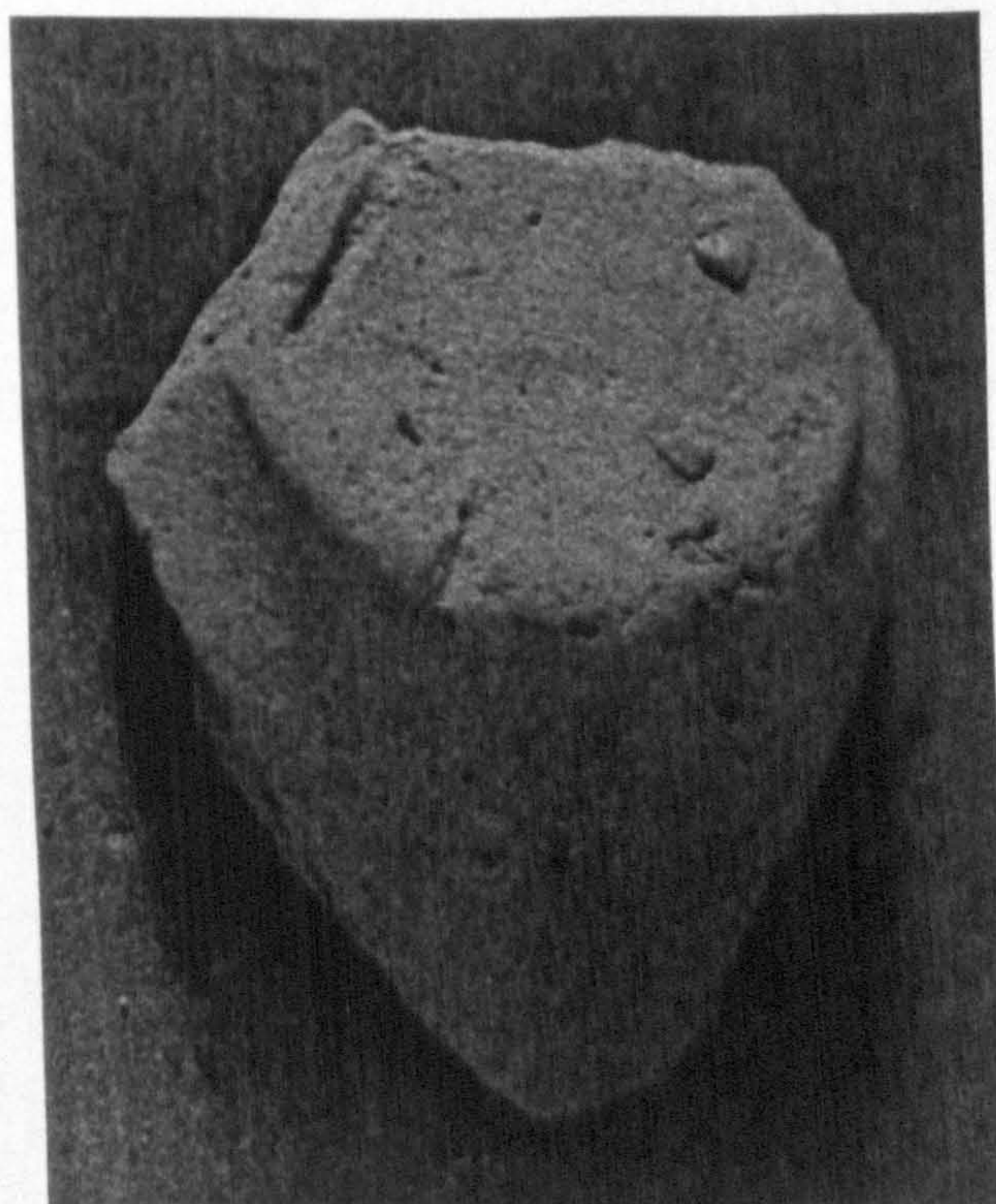
XLVI. Phylakopi 1974-77 201-206. Various scales



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208

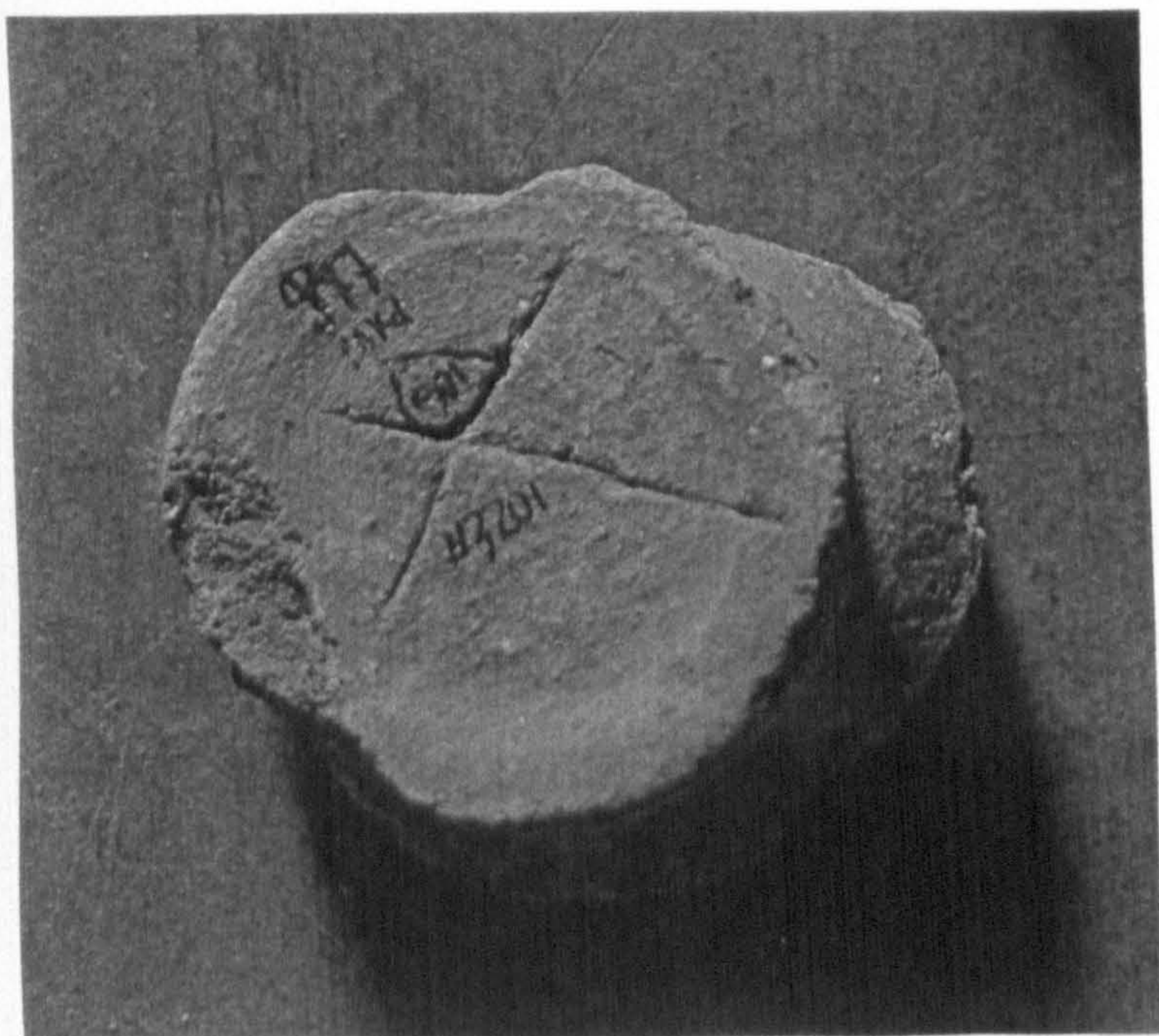


209

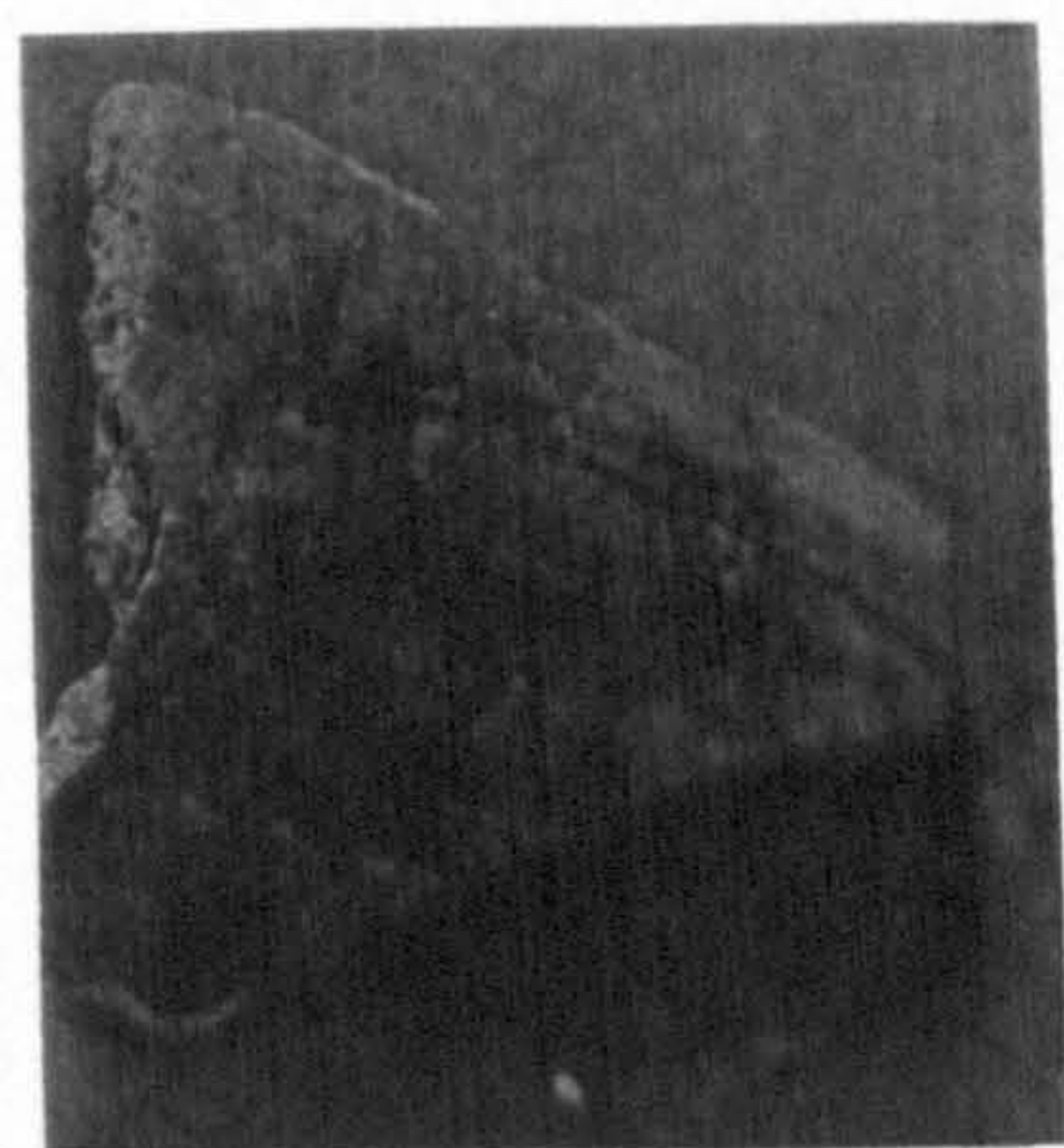


210

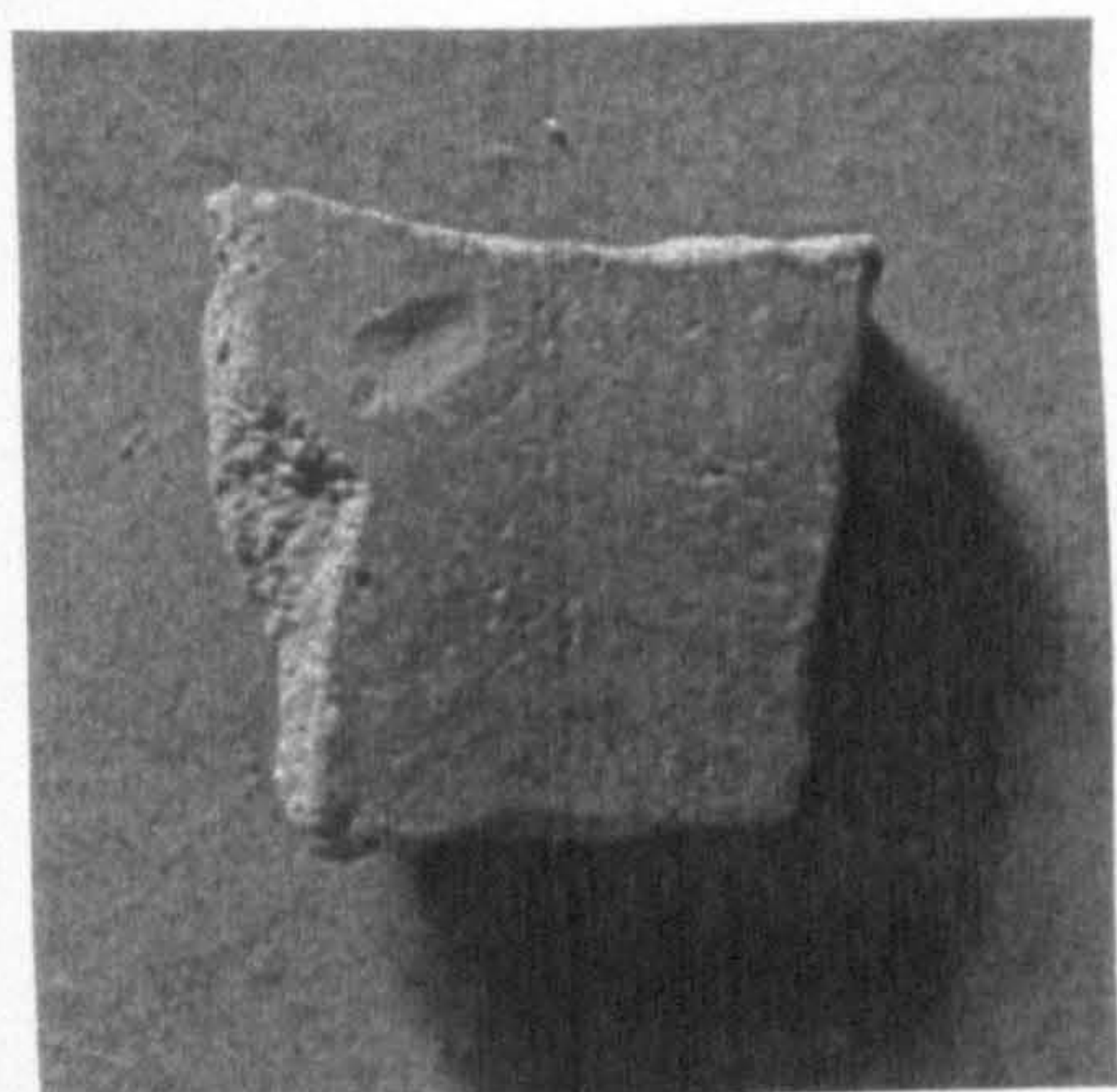
XLVII. Phylakopi 1974-77 207-210. Various scales



211



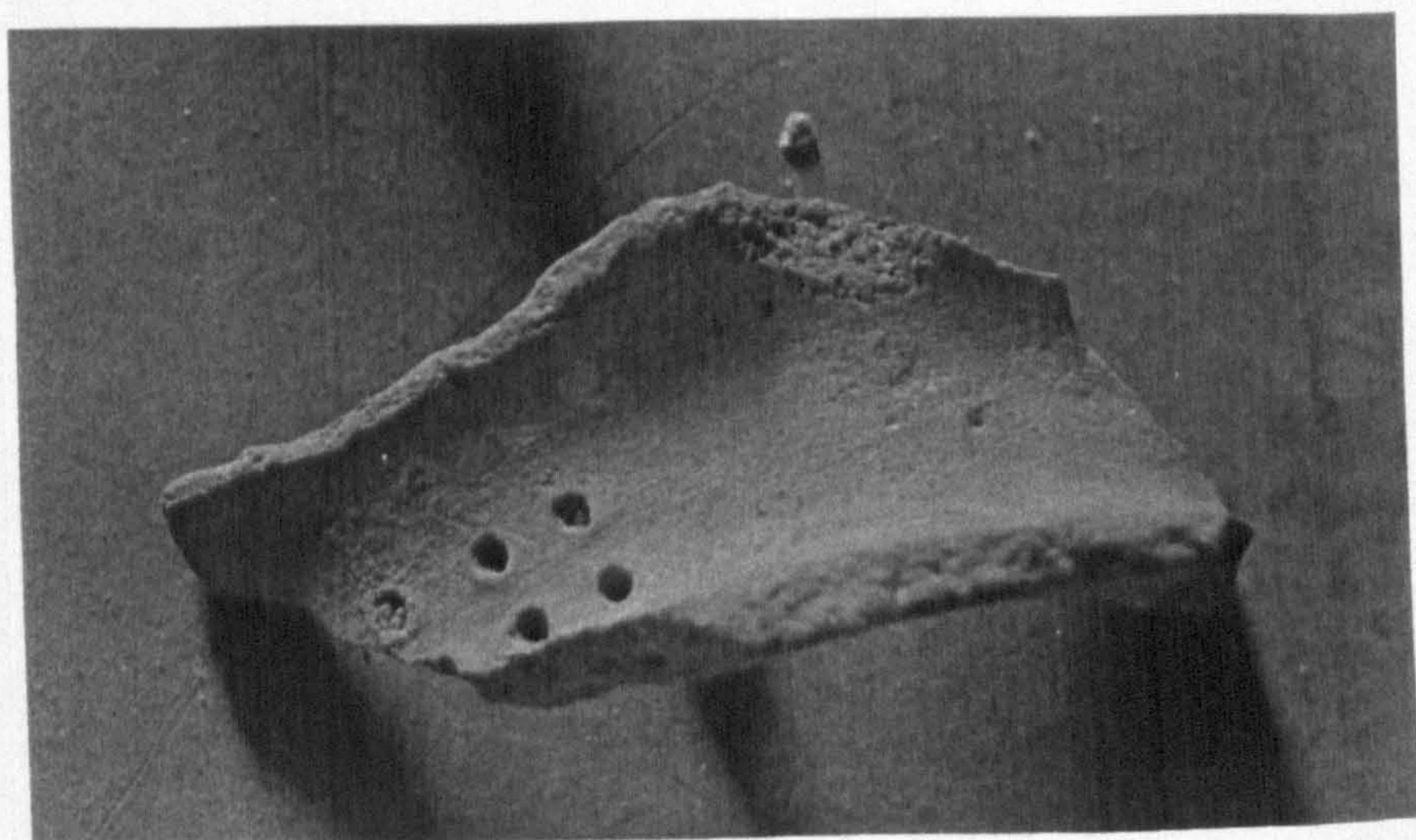
212



213

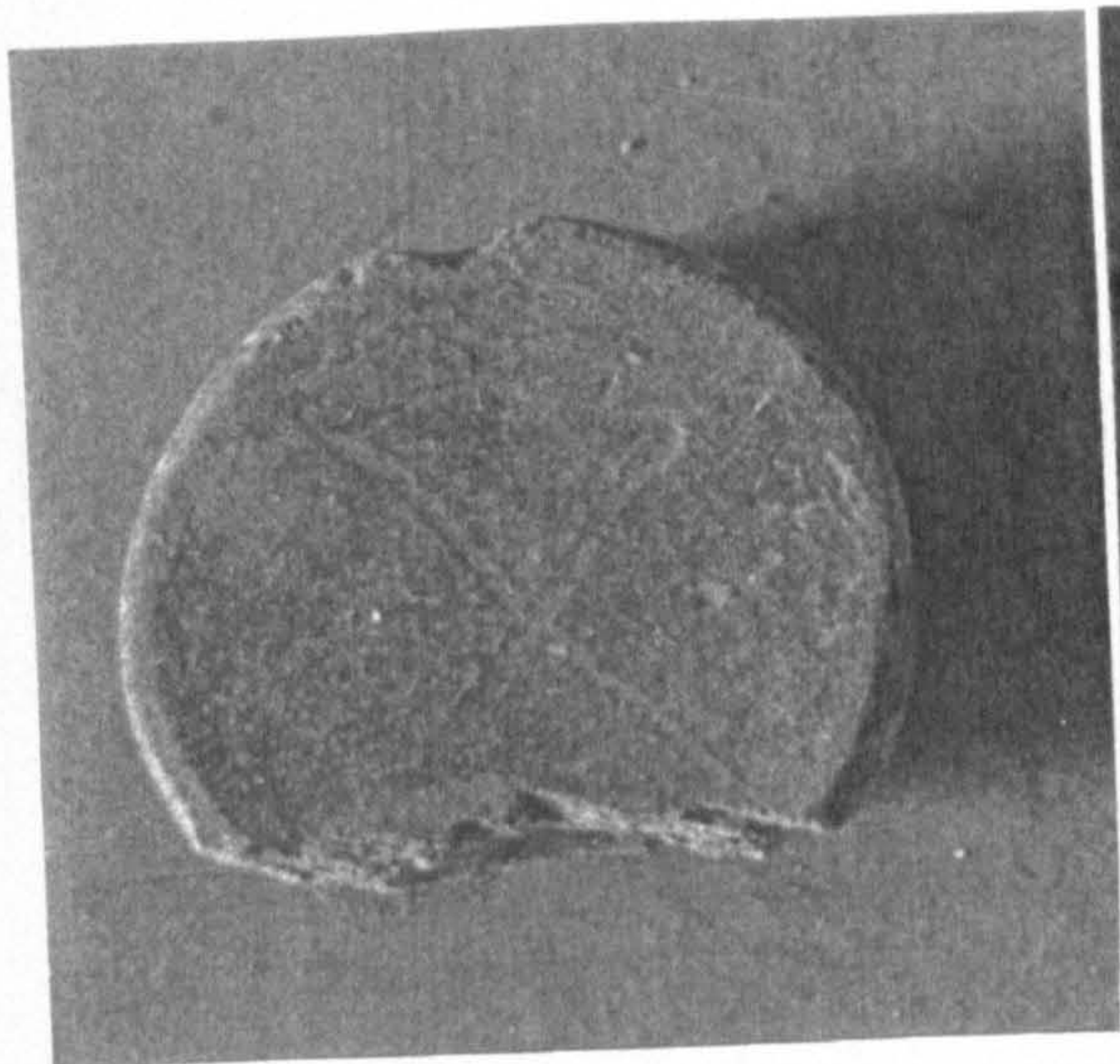


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215

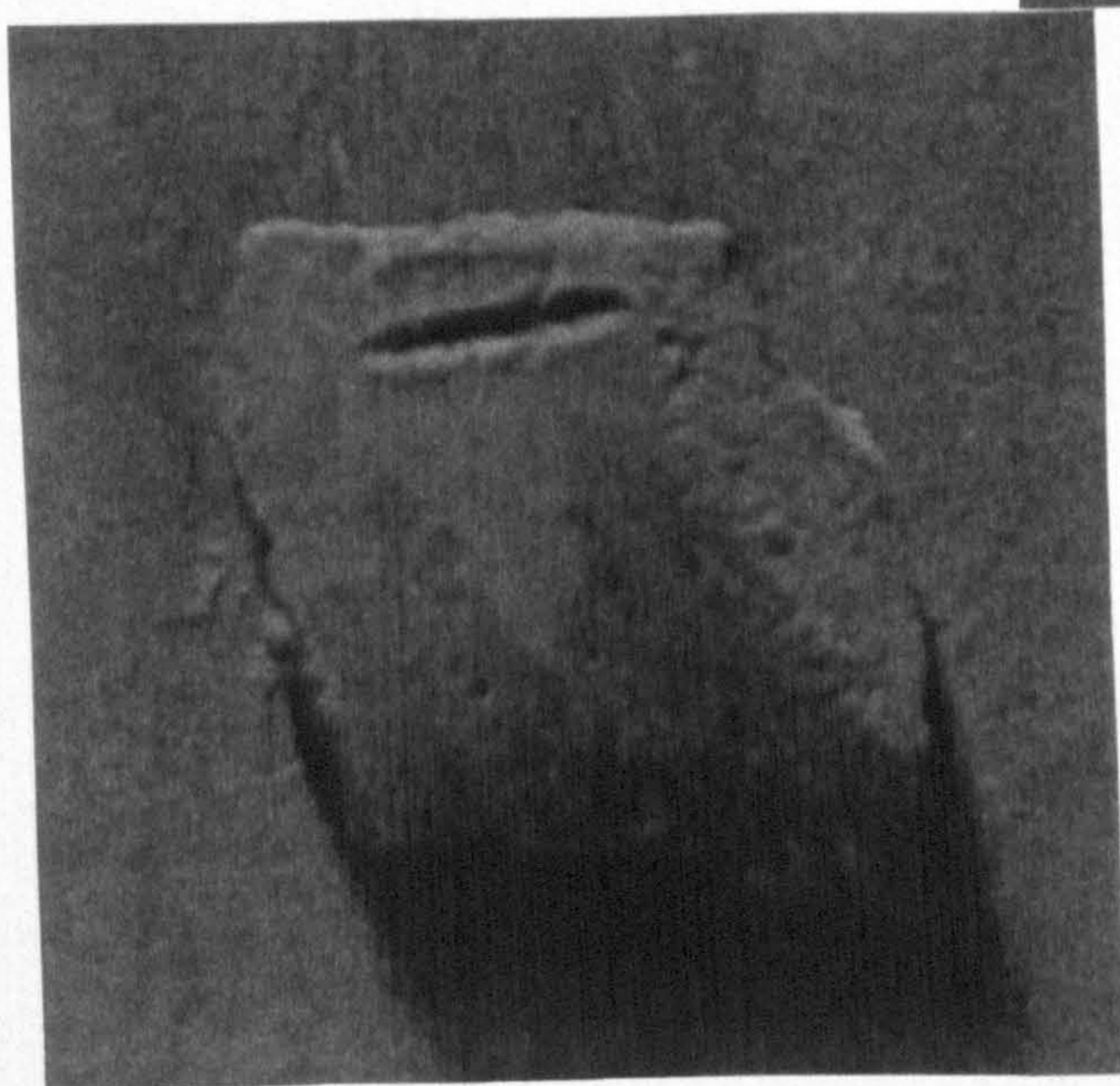
XLVIII. Phylakopi 1974-77 211-215. Various scales



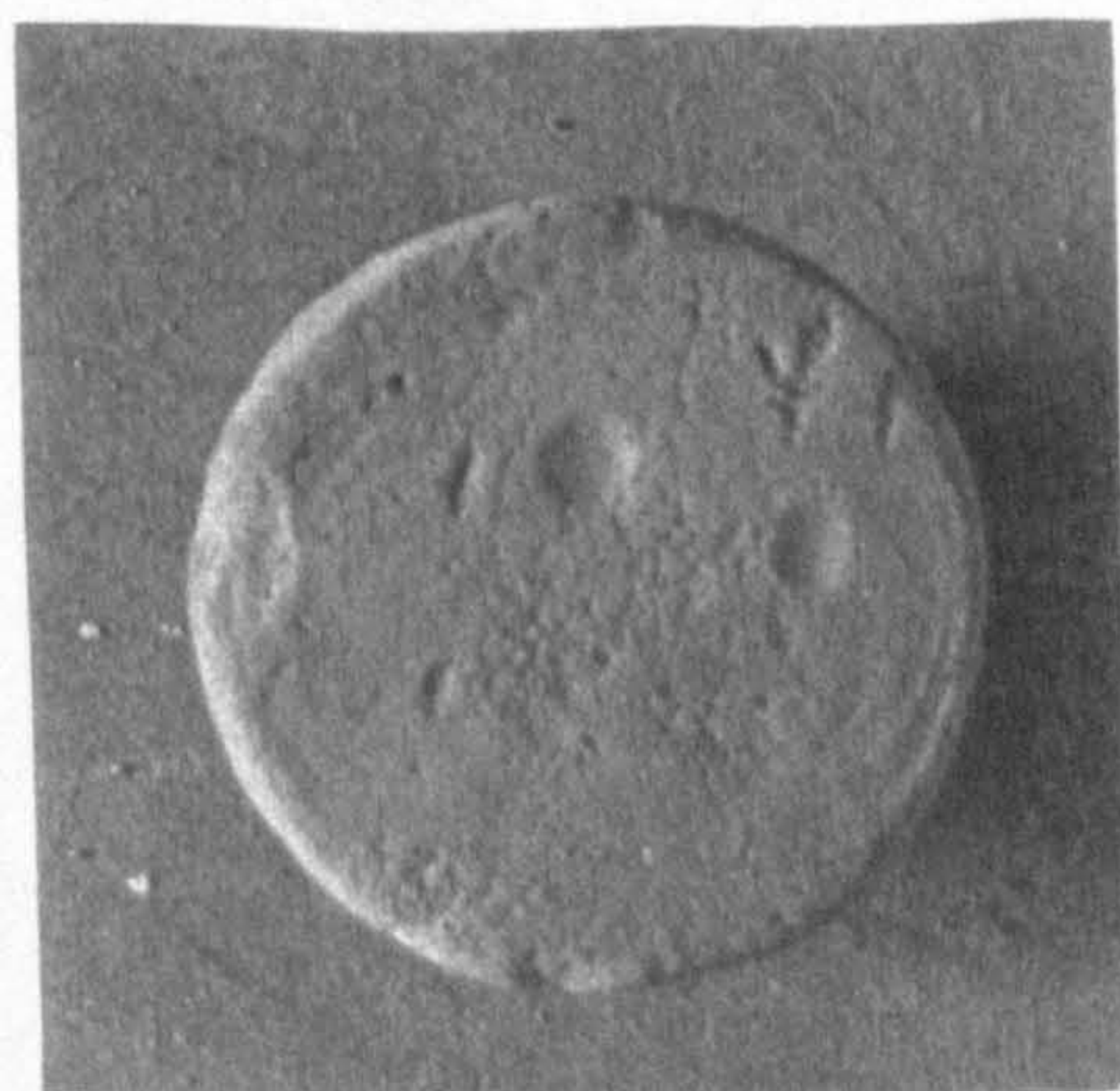
216



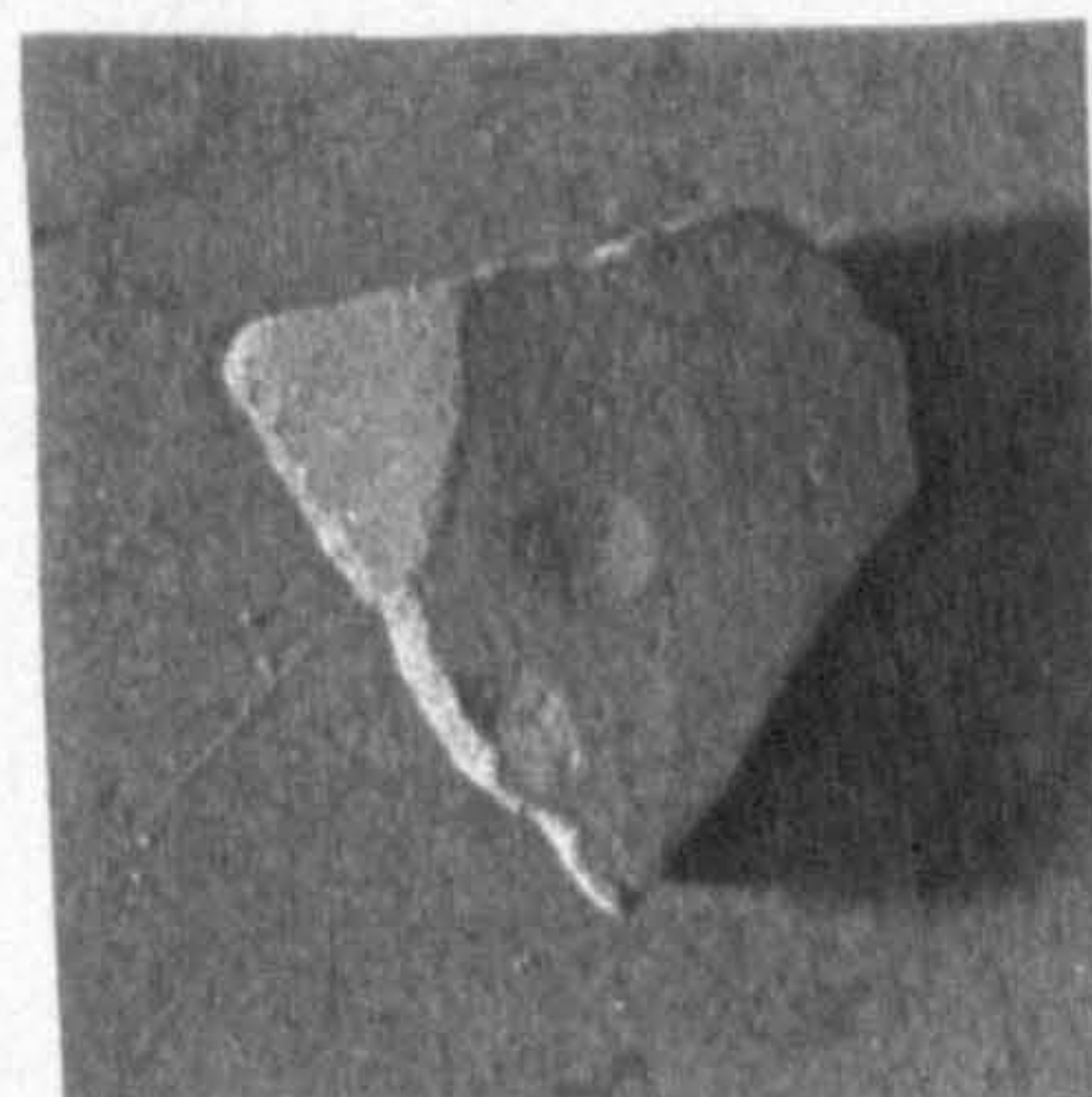
217



218

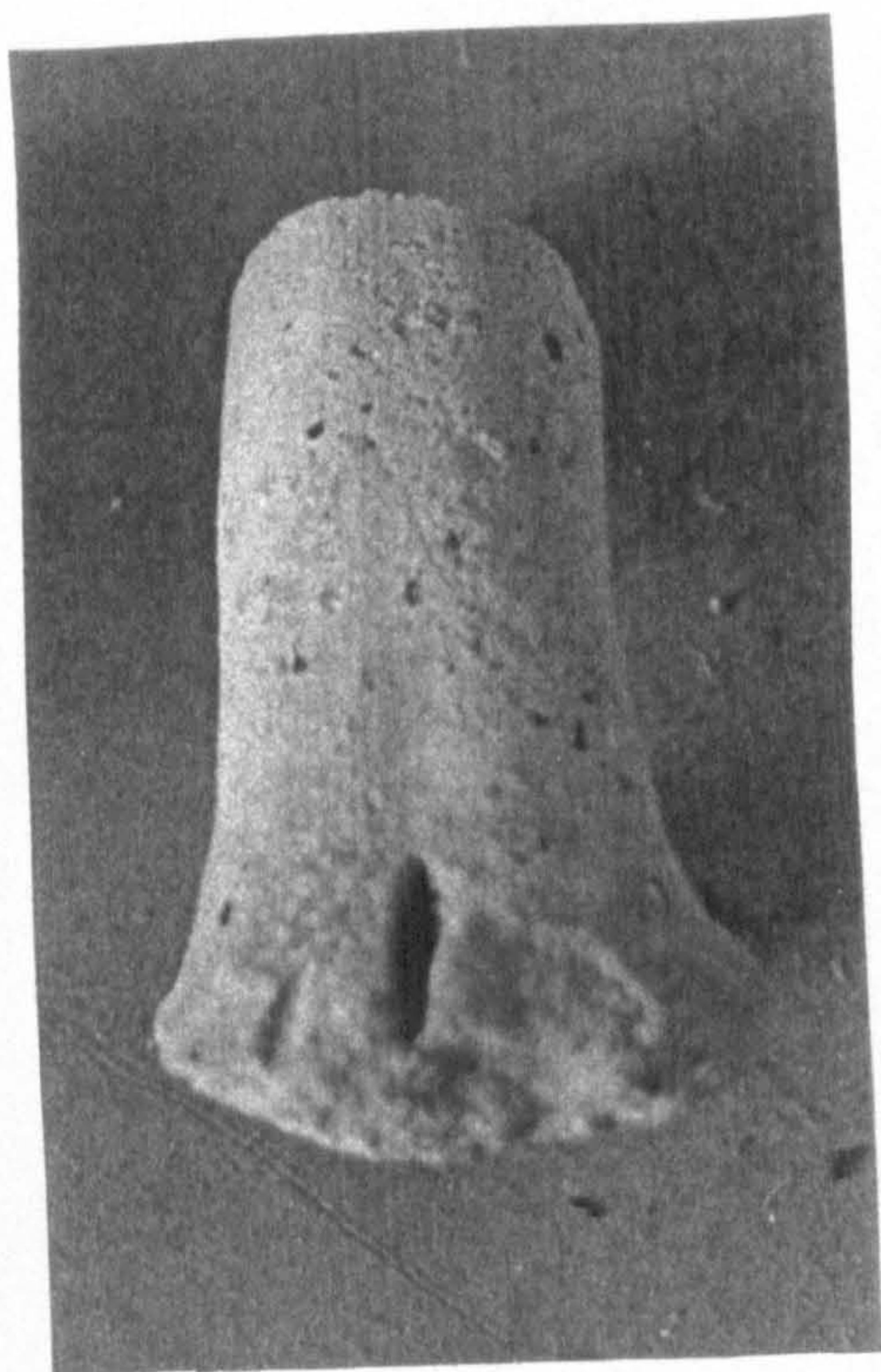


219

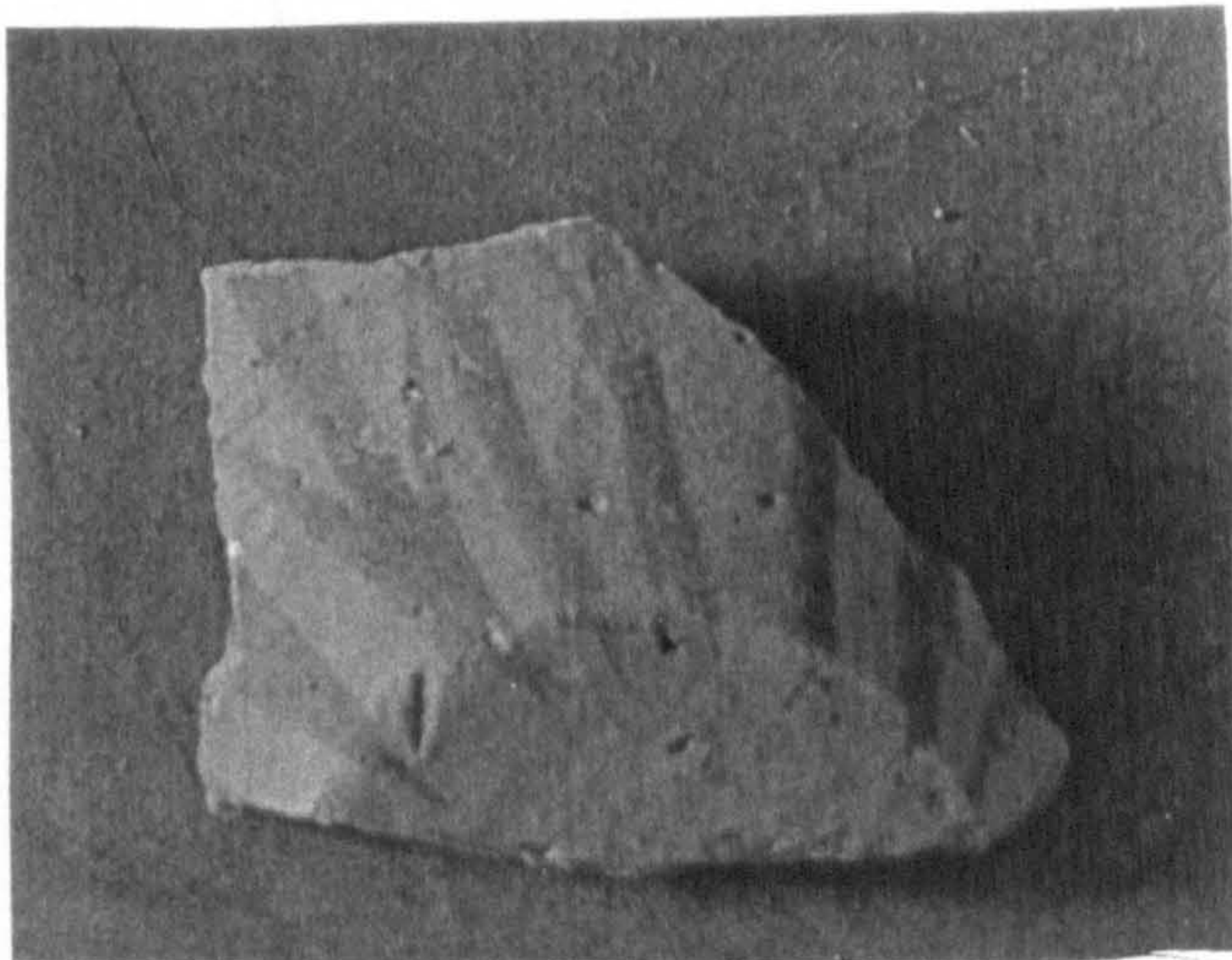


220

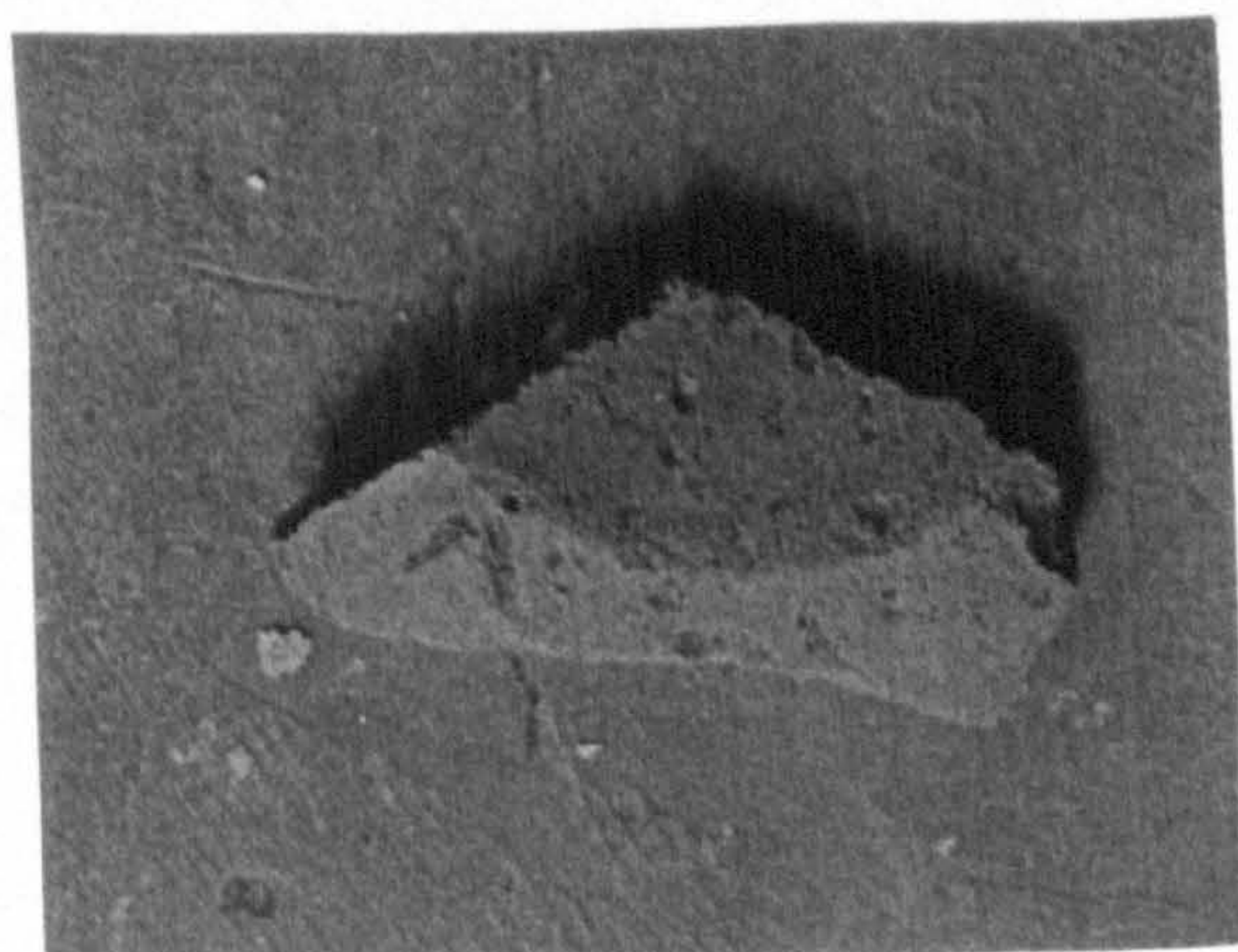
XLIX. Phylakopi 1974-77 216-220. Various scales



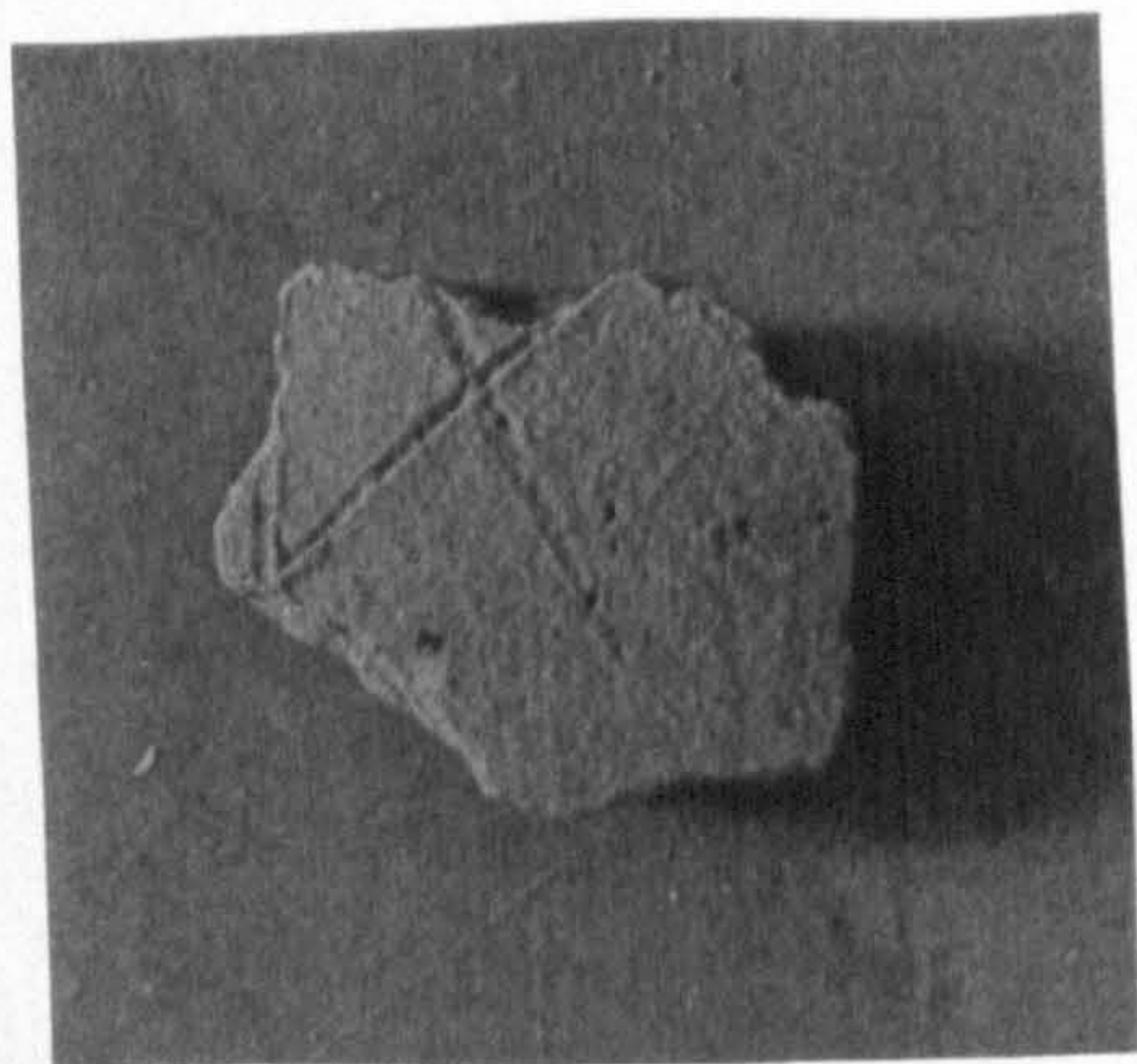
221



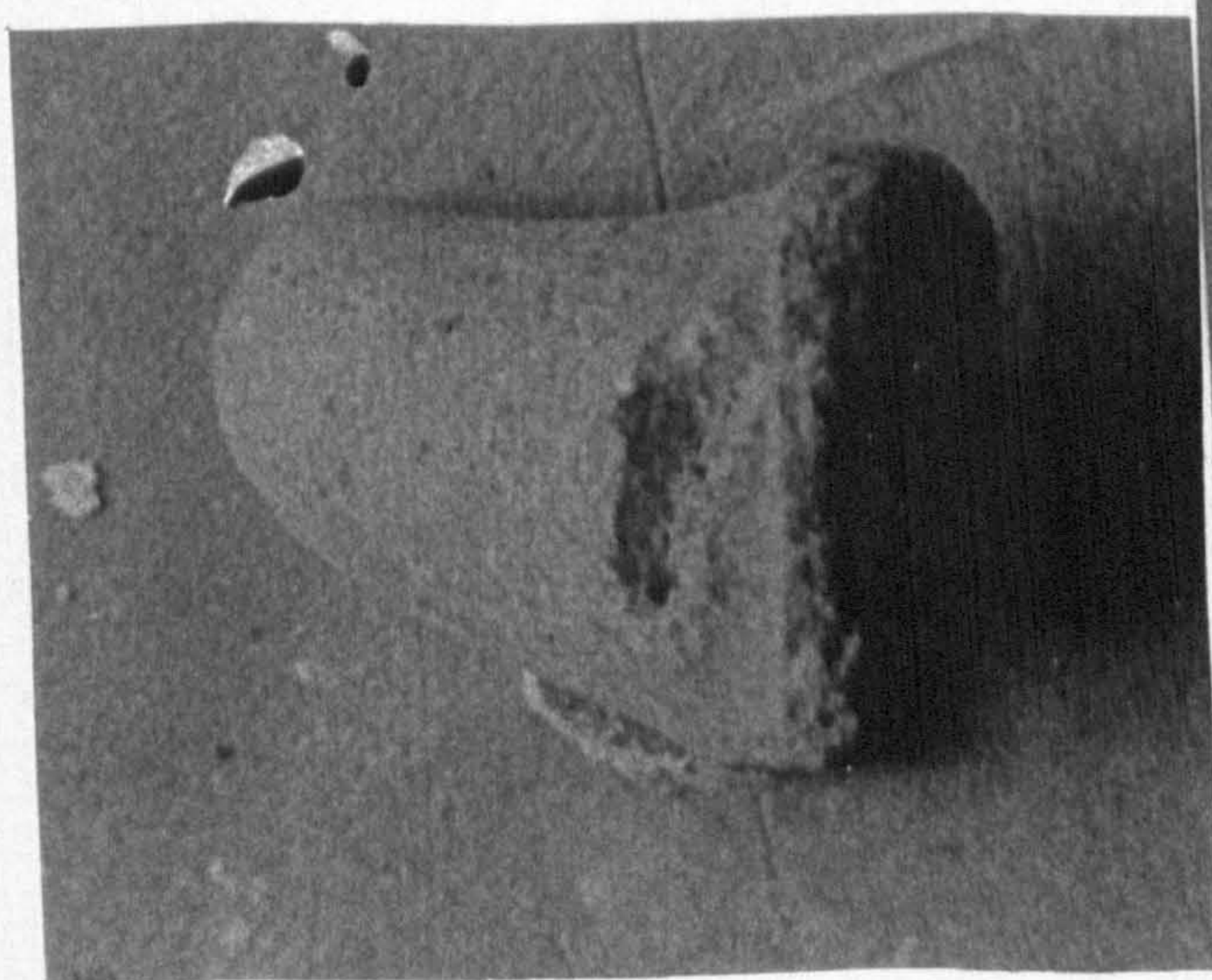
222



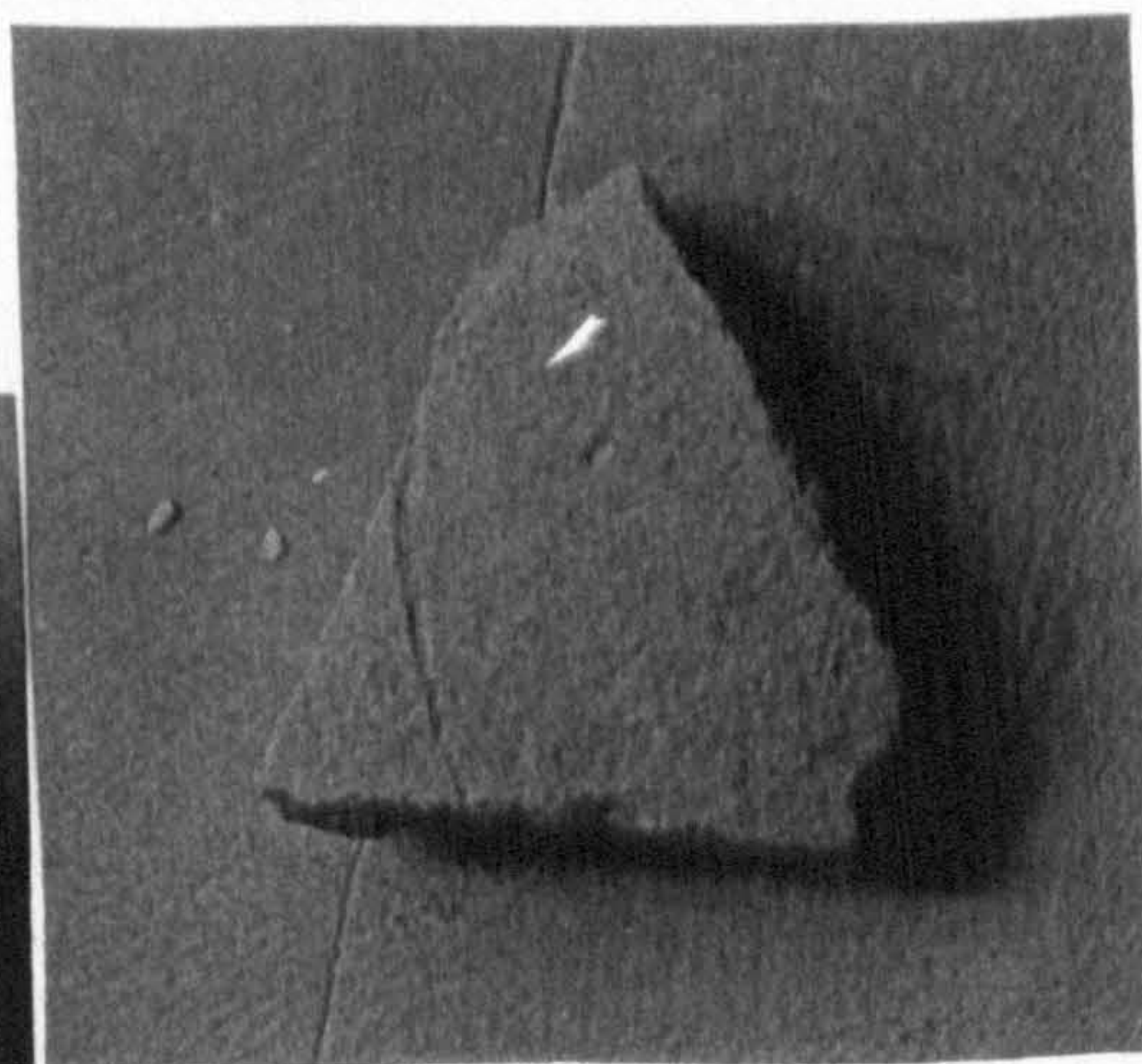
224



223

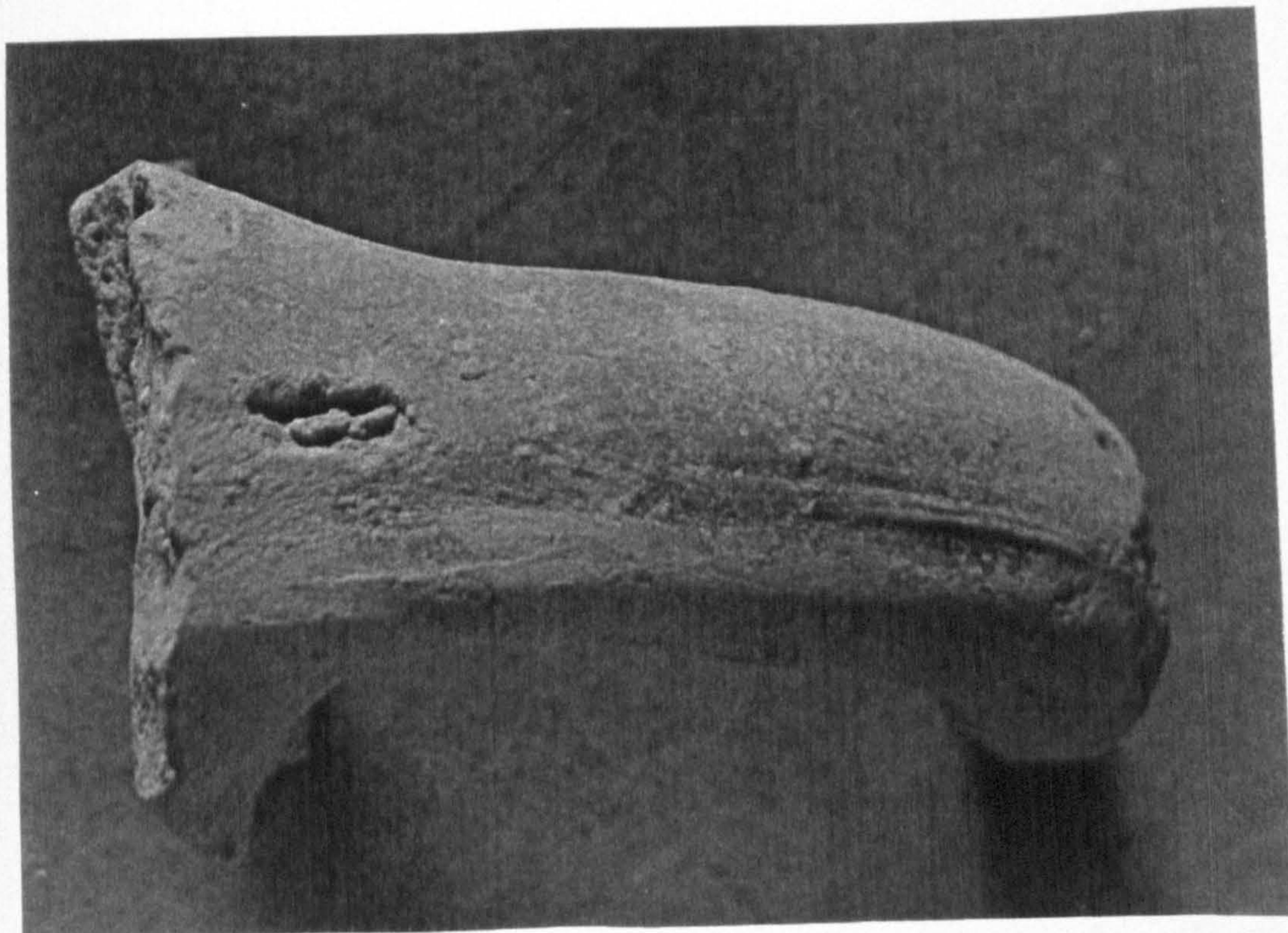


225

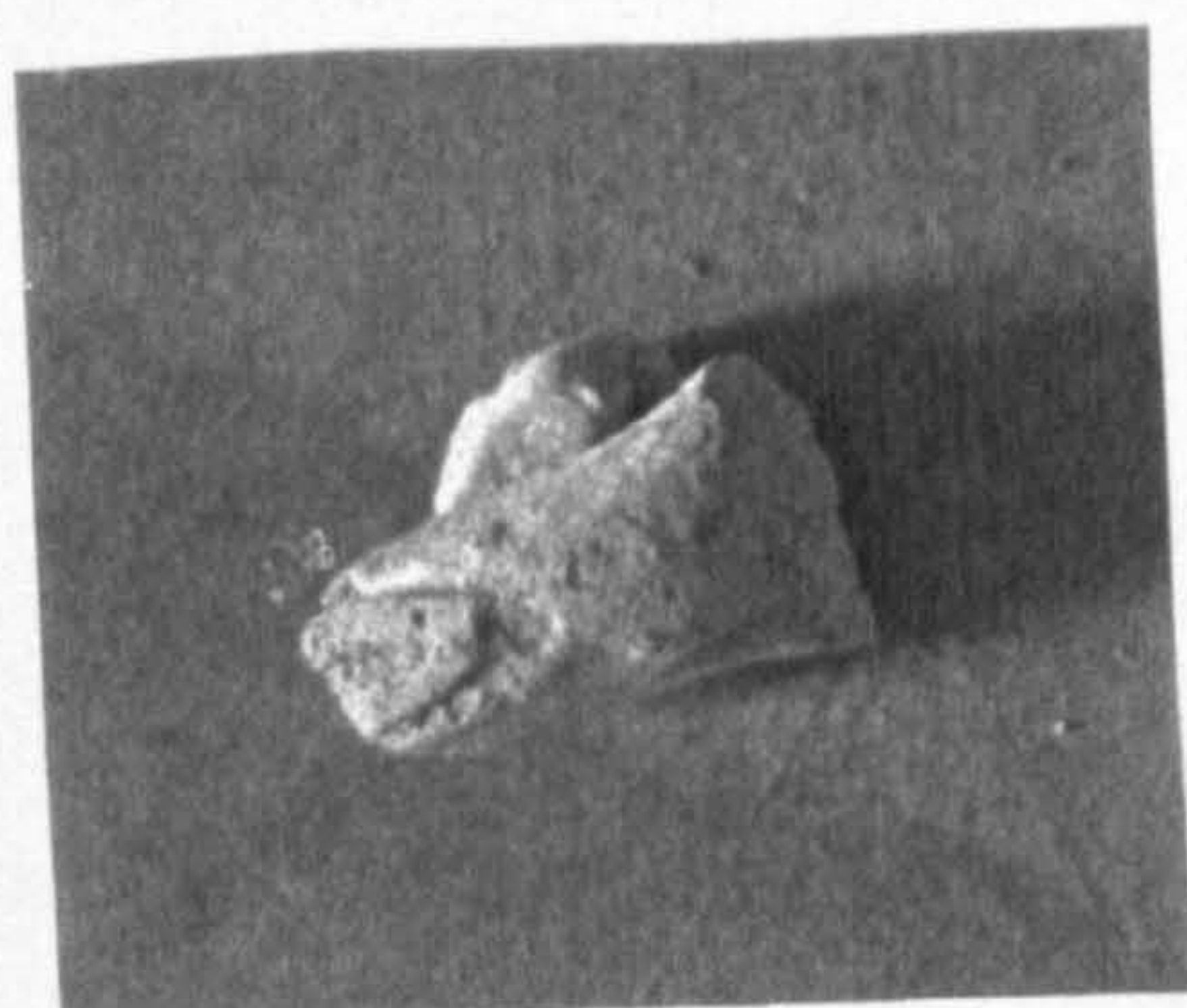


226

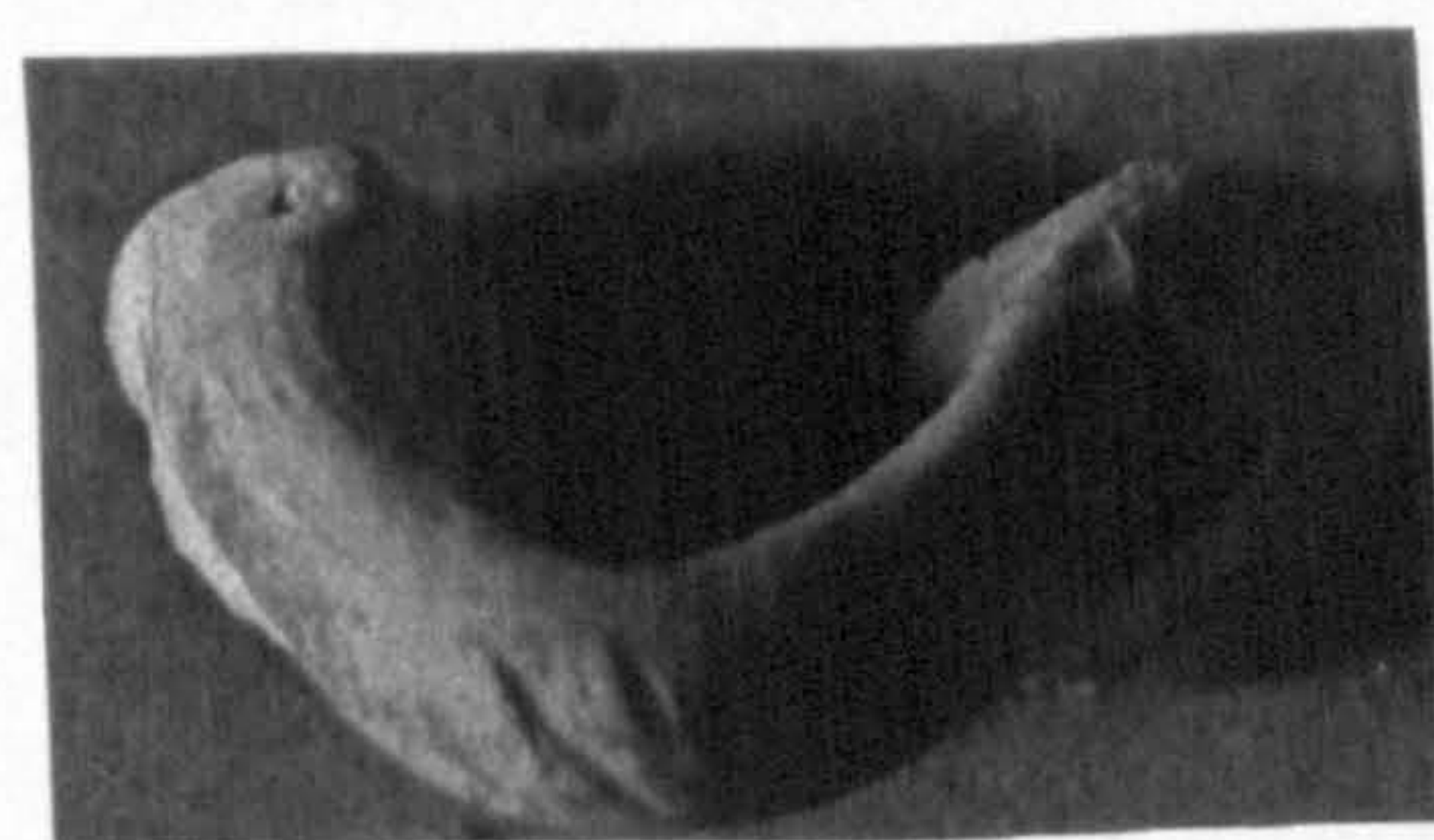
L. Phylakopi 1974-77 221-226. Various scales



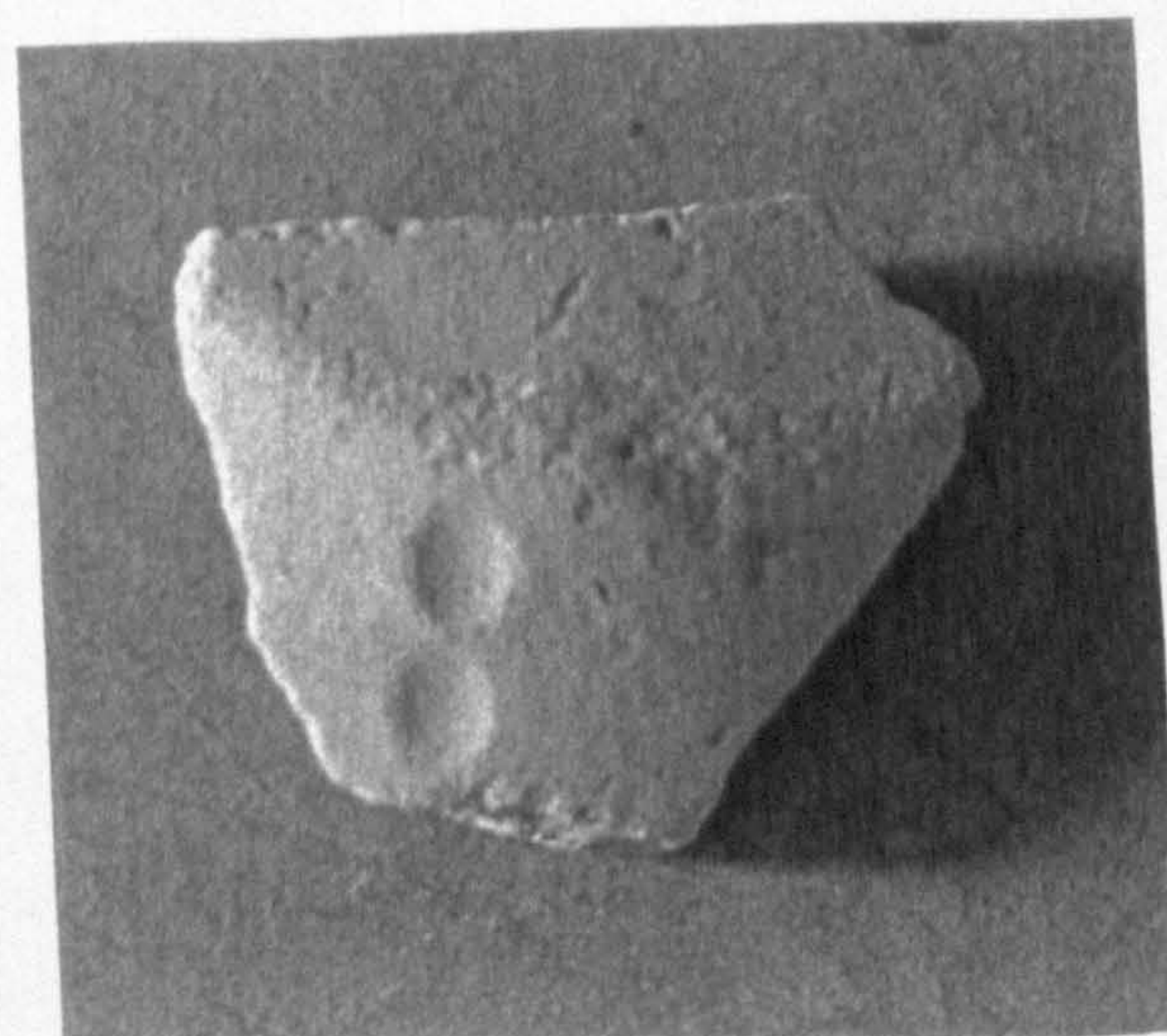
227



228



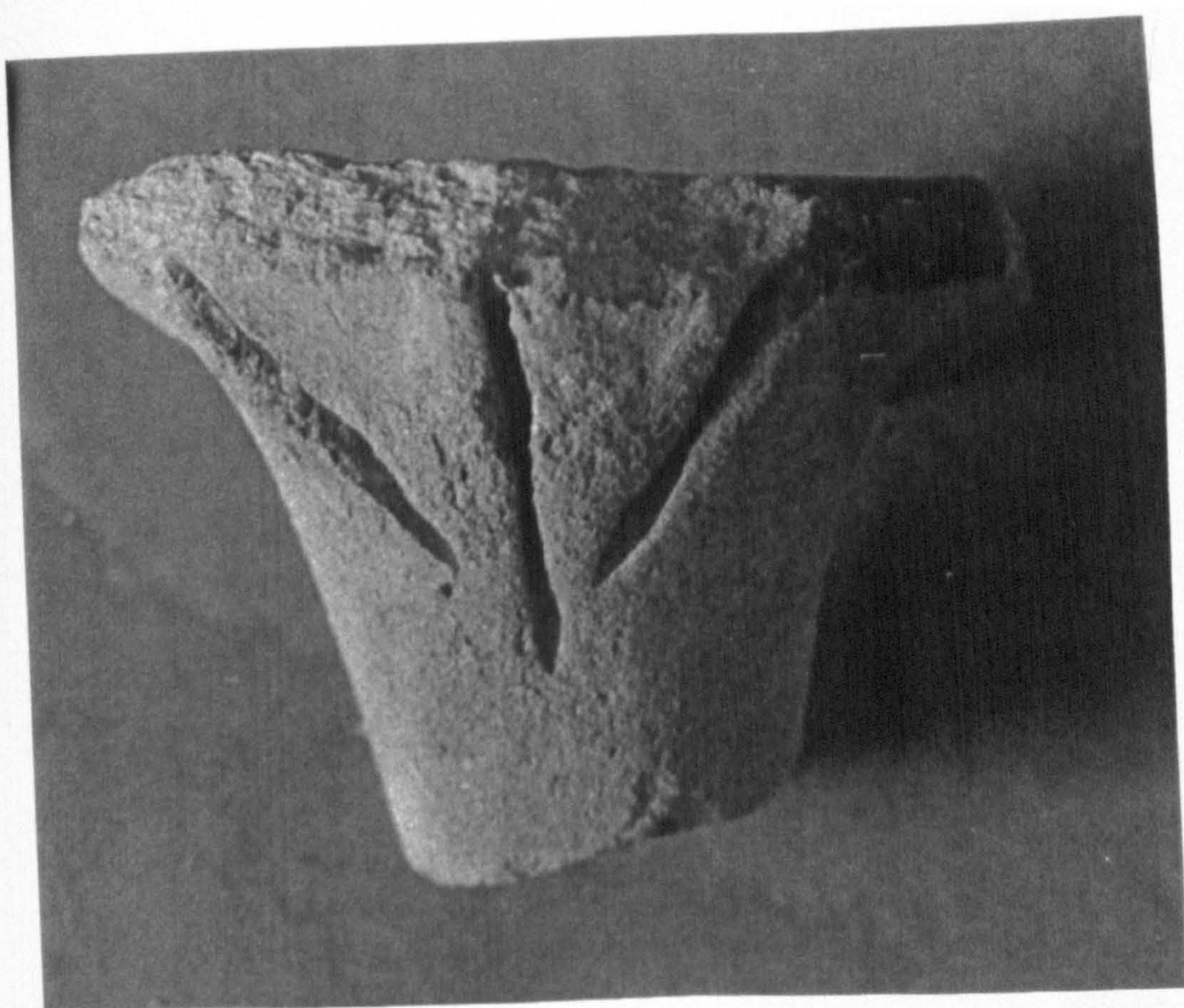
229



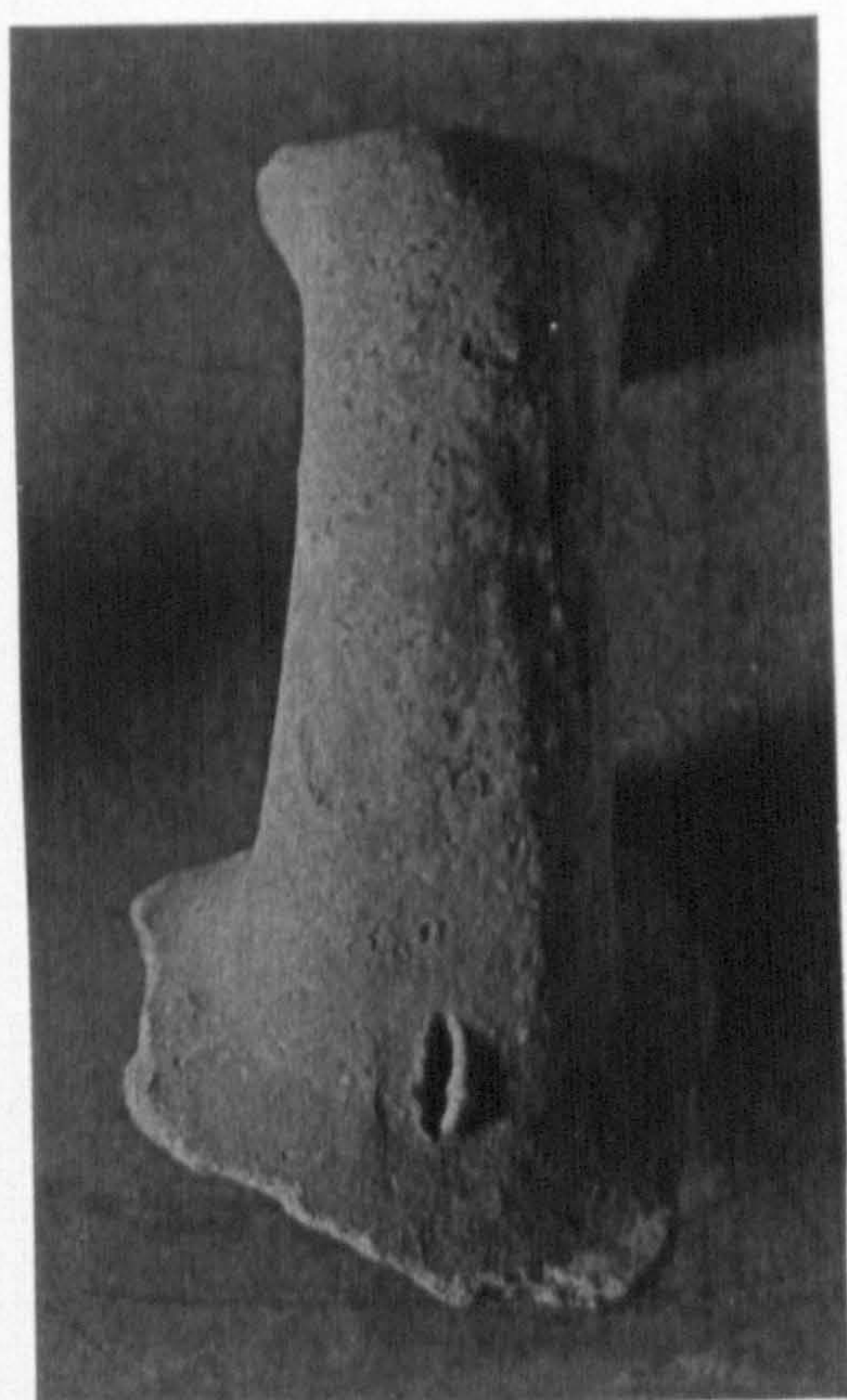
230

LI. Phylakopi 1974-77 227-230. Various scales

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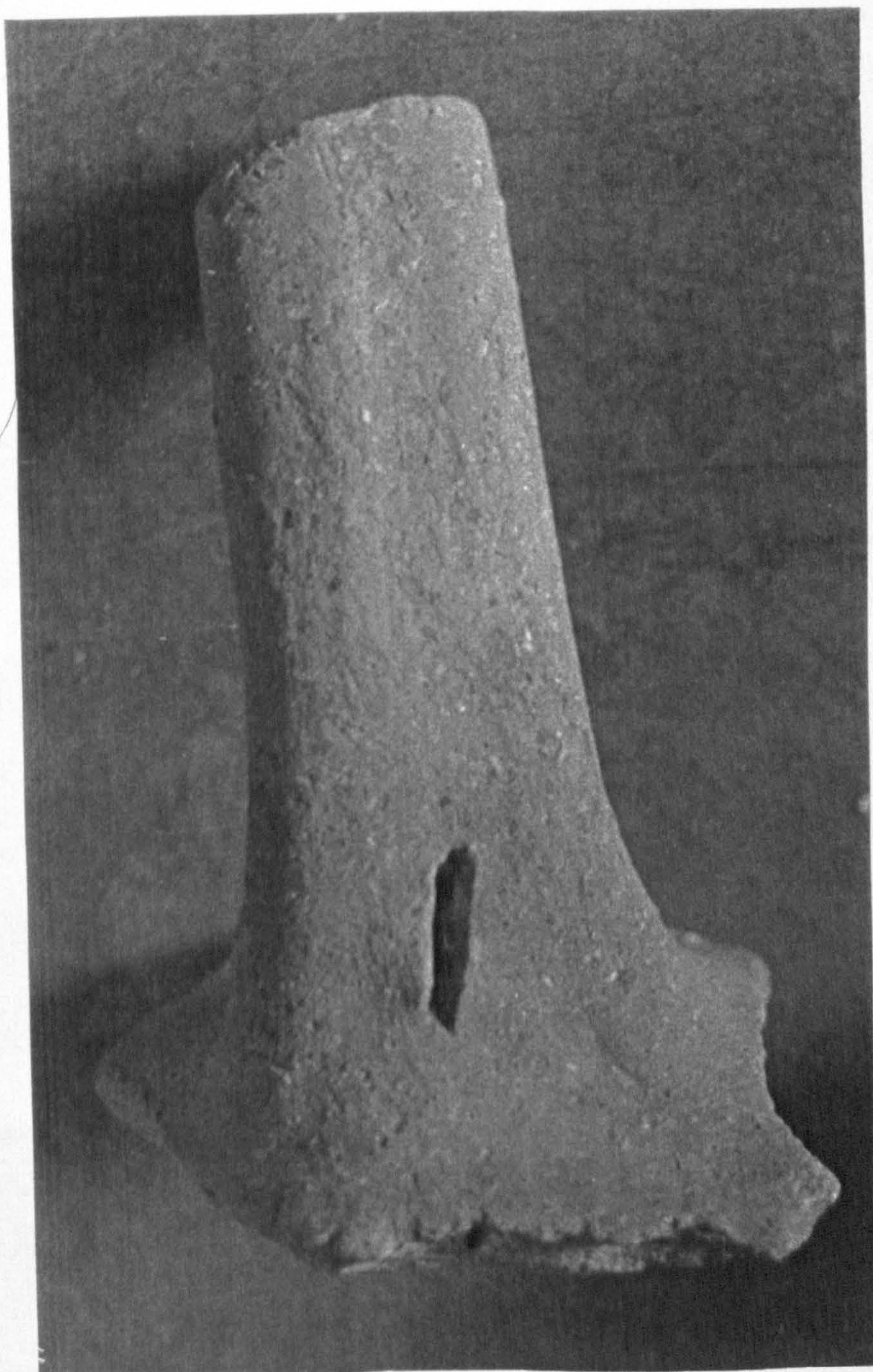


232



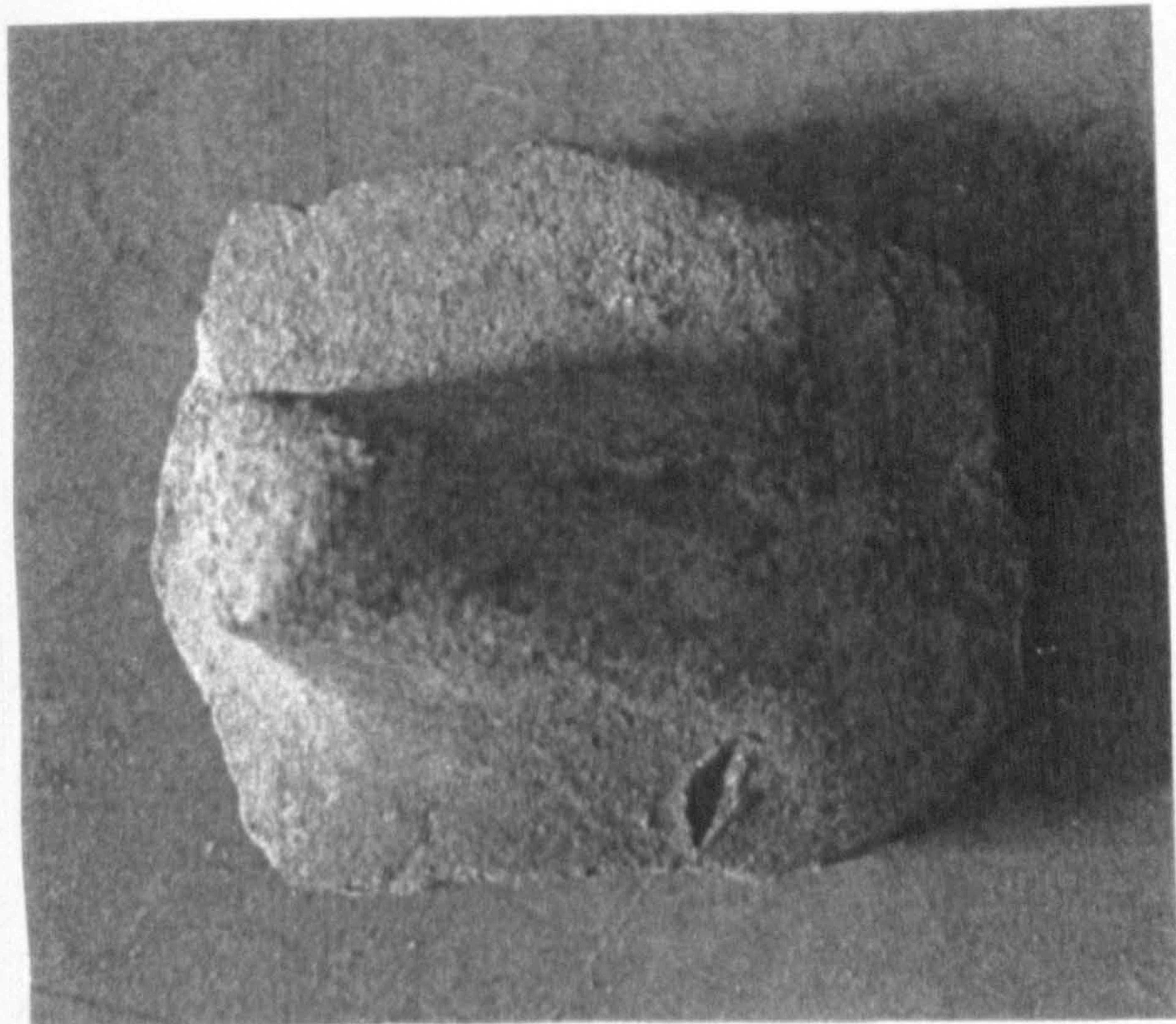
234

LII. Phylakopi 1974-77 231, 232, 234. Various scales

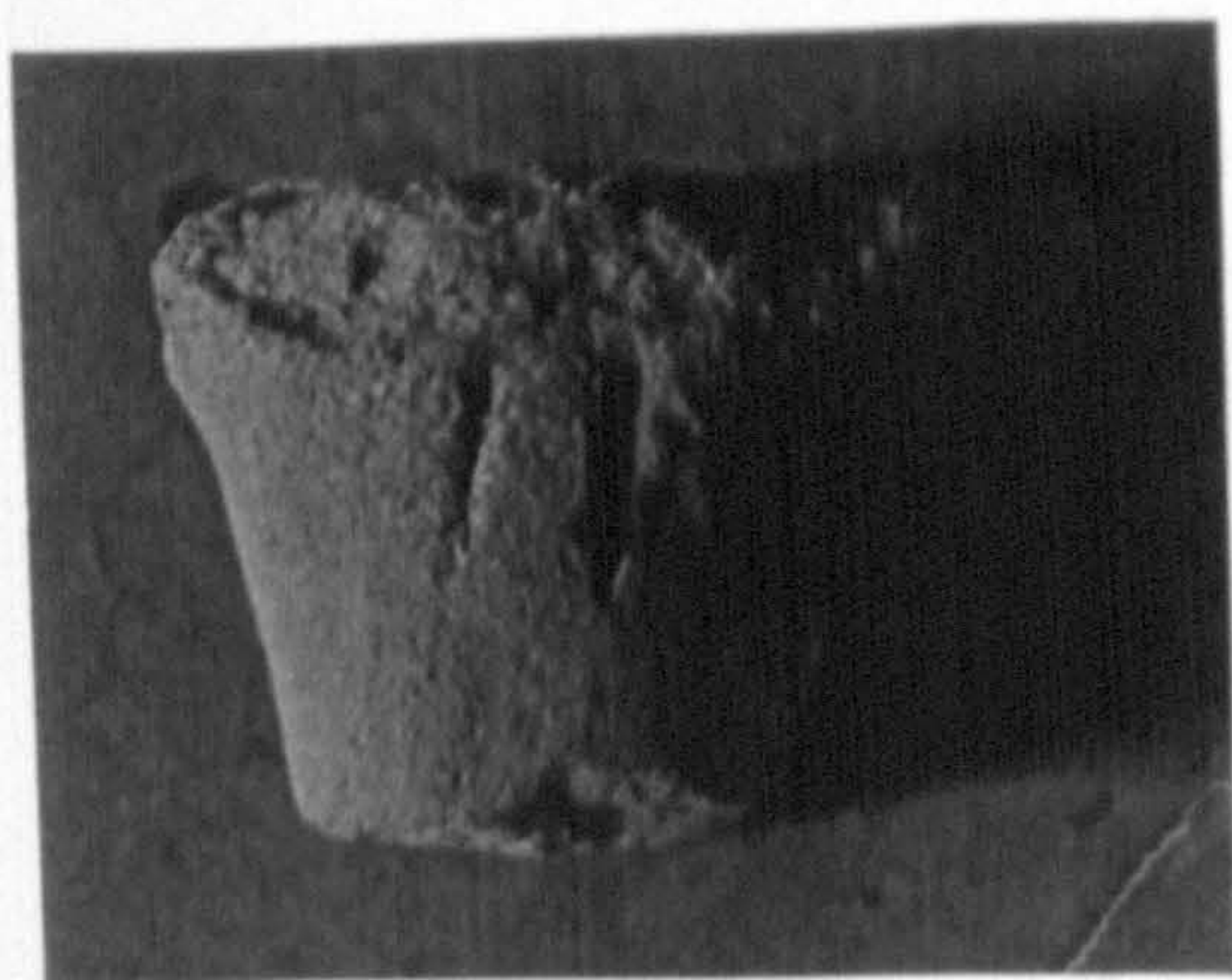


233

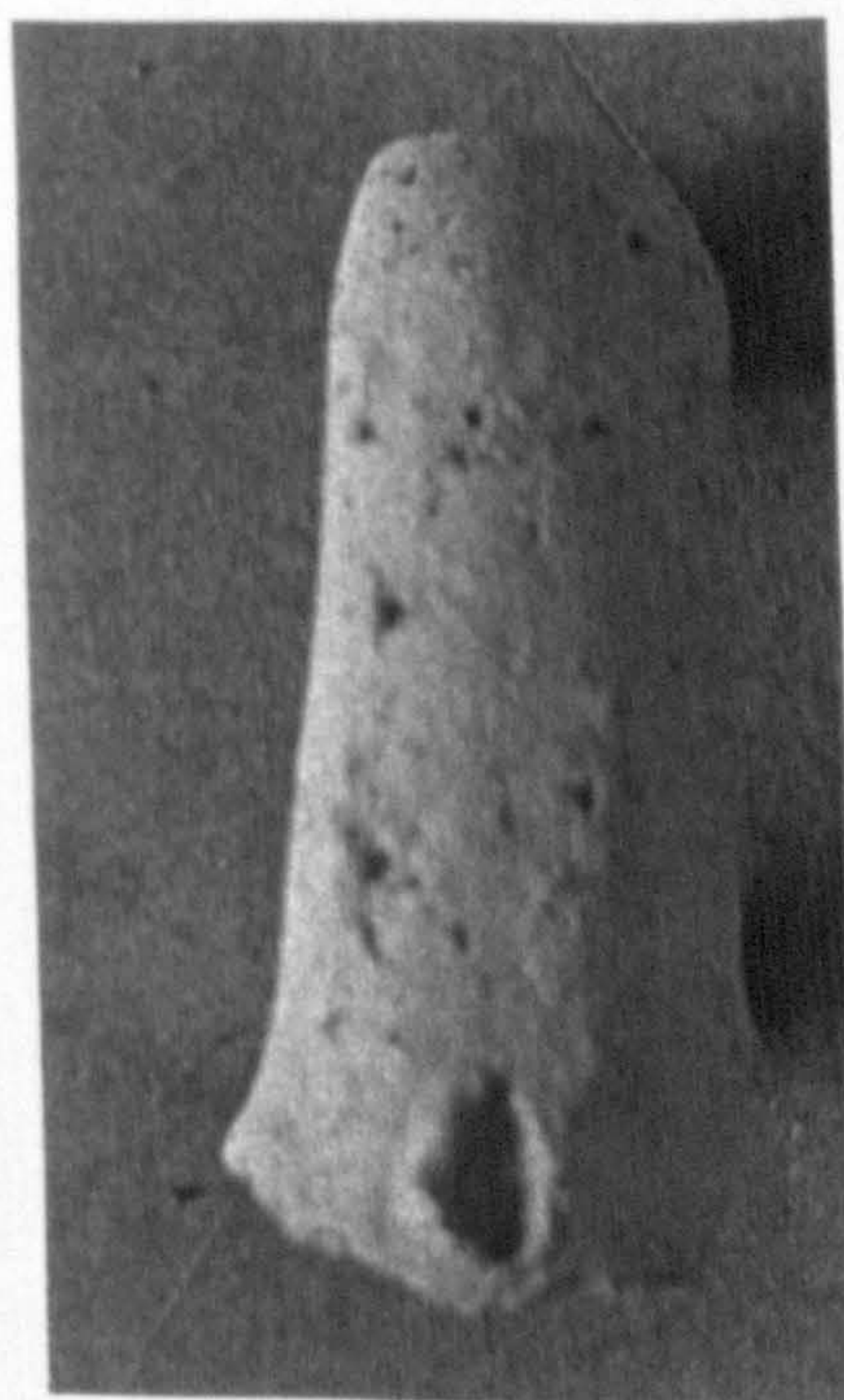
LIII. Phylakopi 1974-77 233.



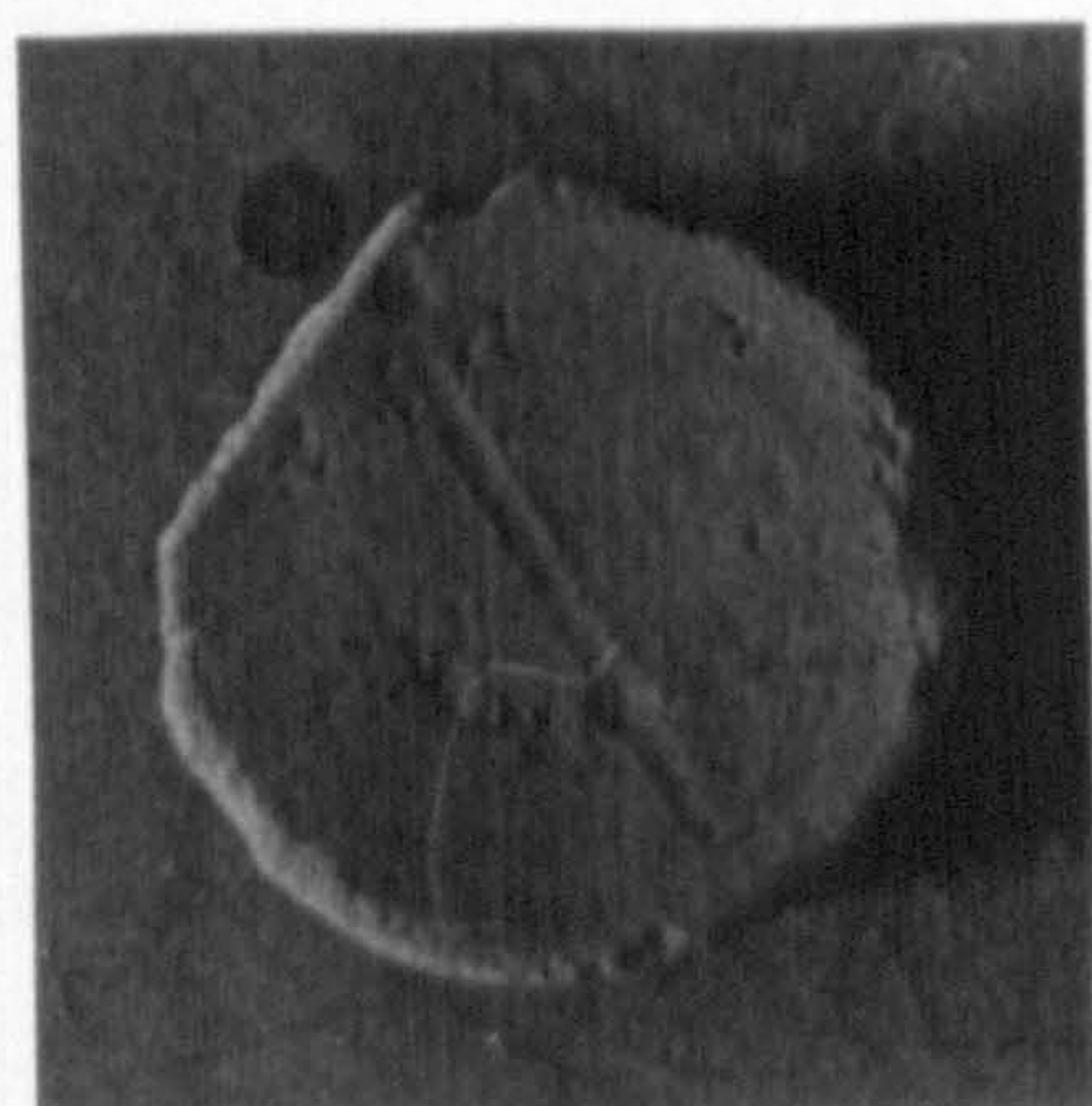
235



236

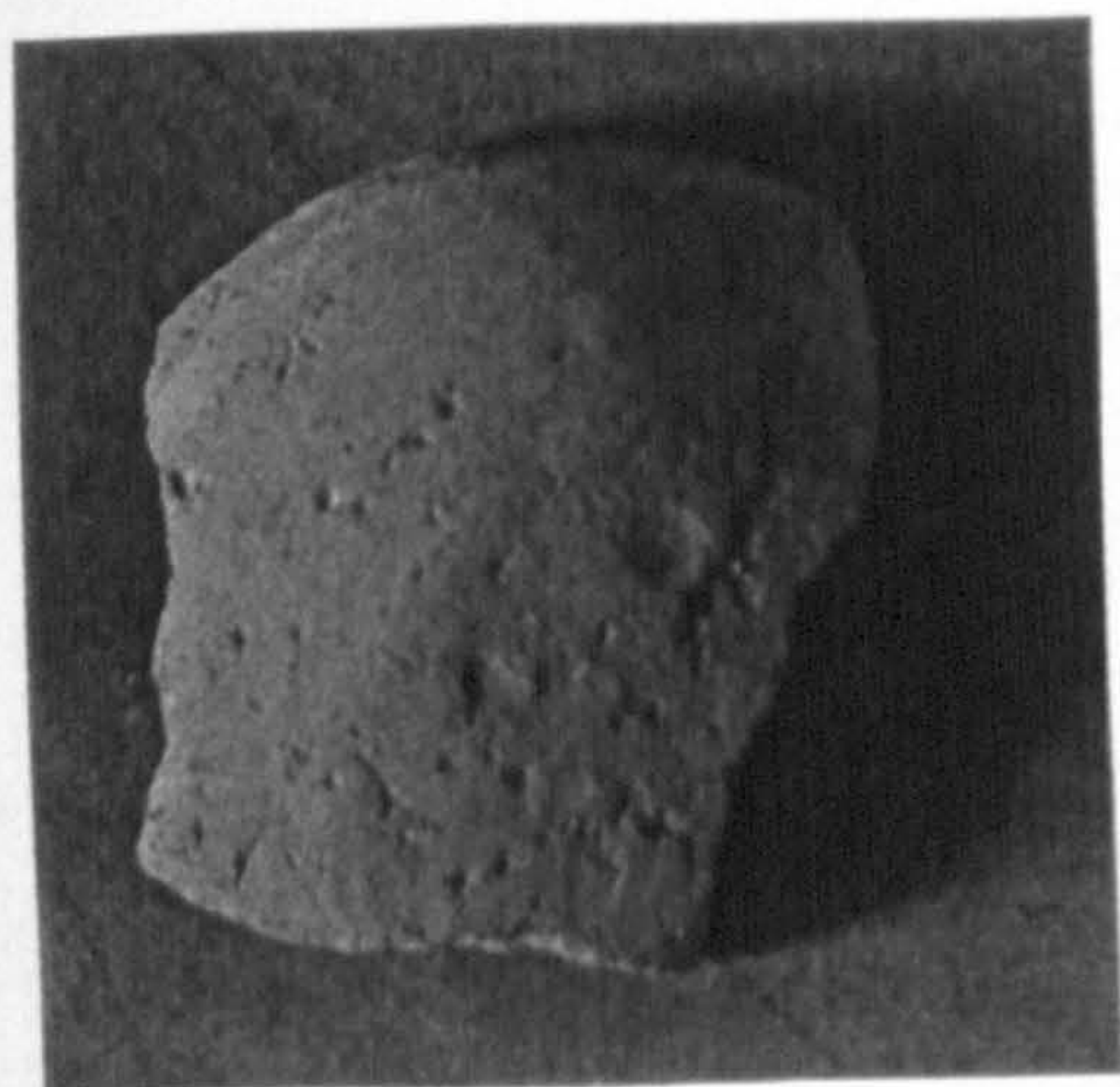


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LIV. Phylakopi 1974-77 235-238. Various scales



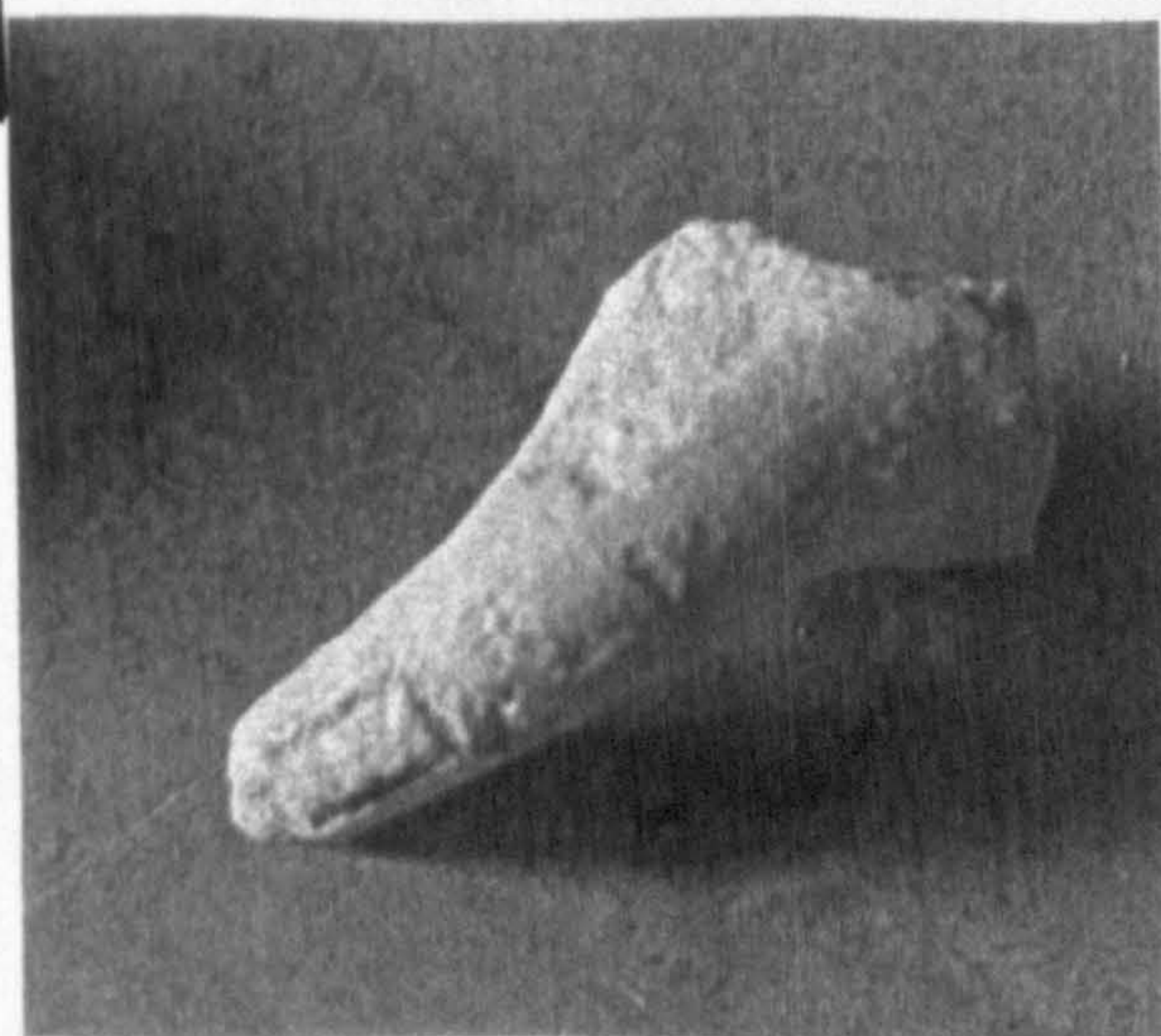
239



242

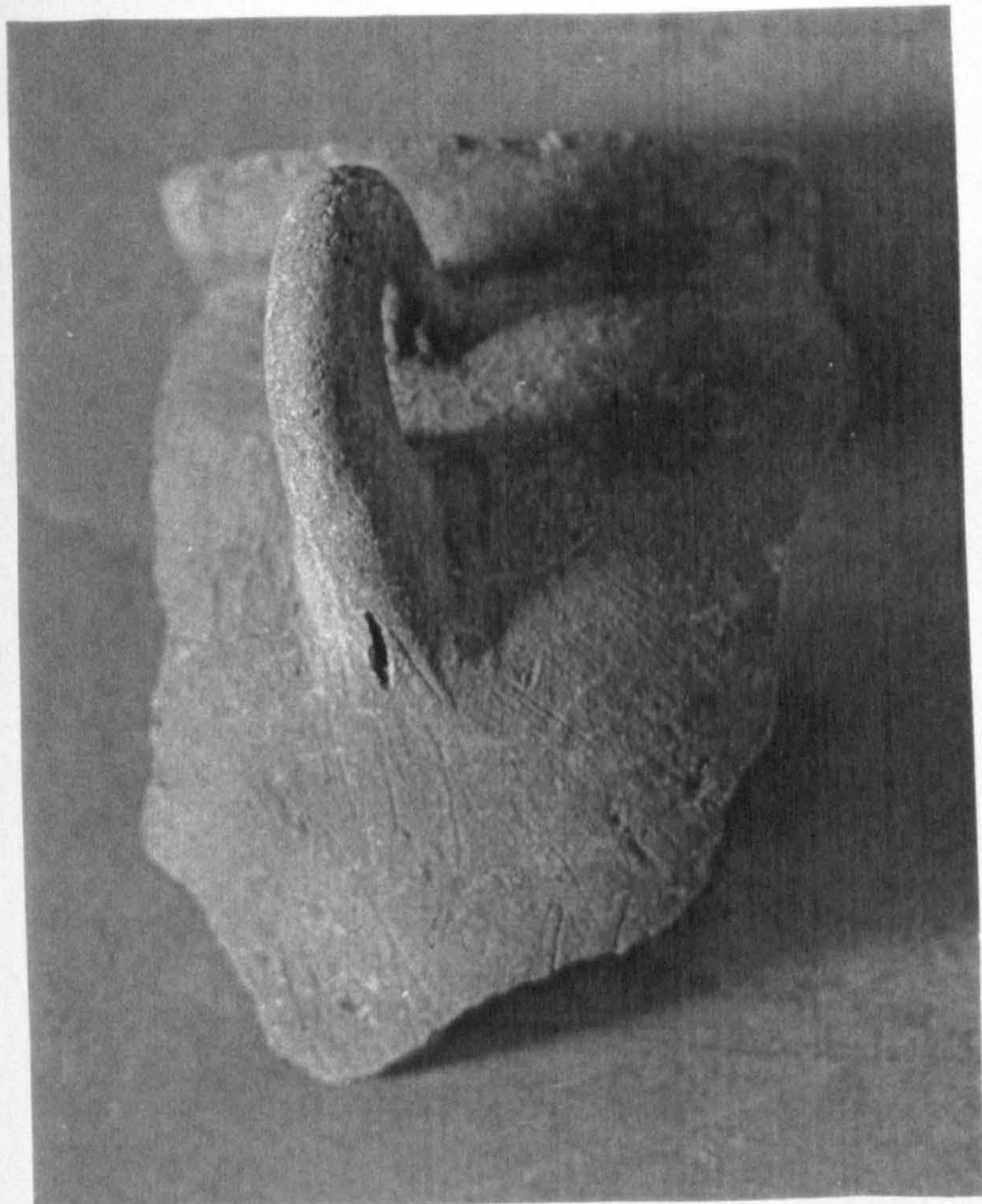


243

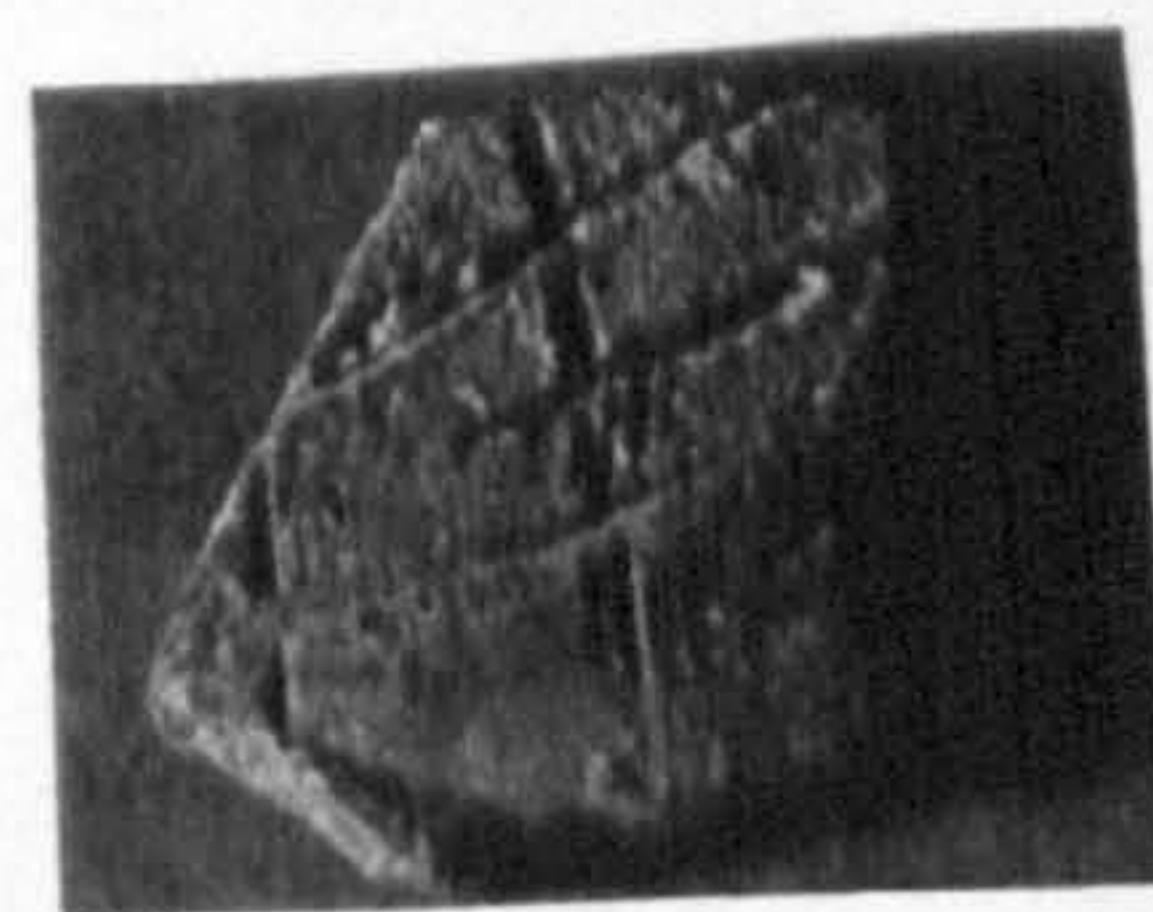


244

LV. Phylakopi 1974-77 239, 242-244. Various scales



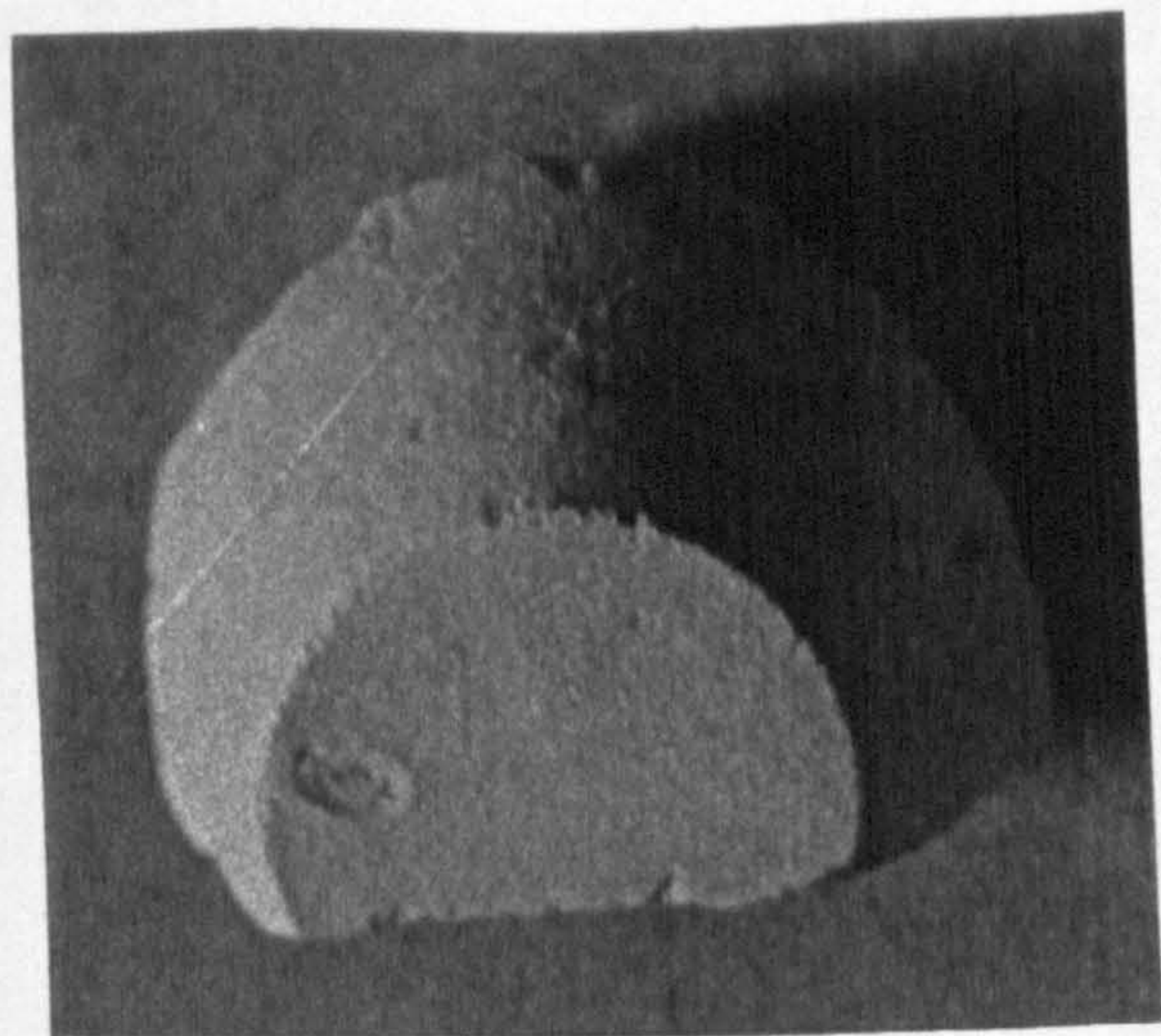
245



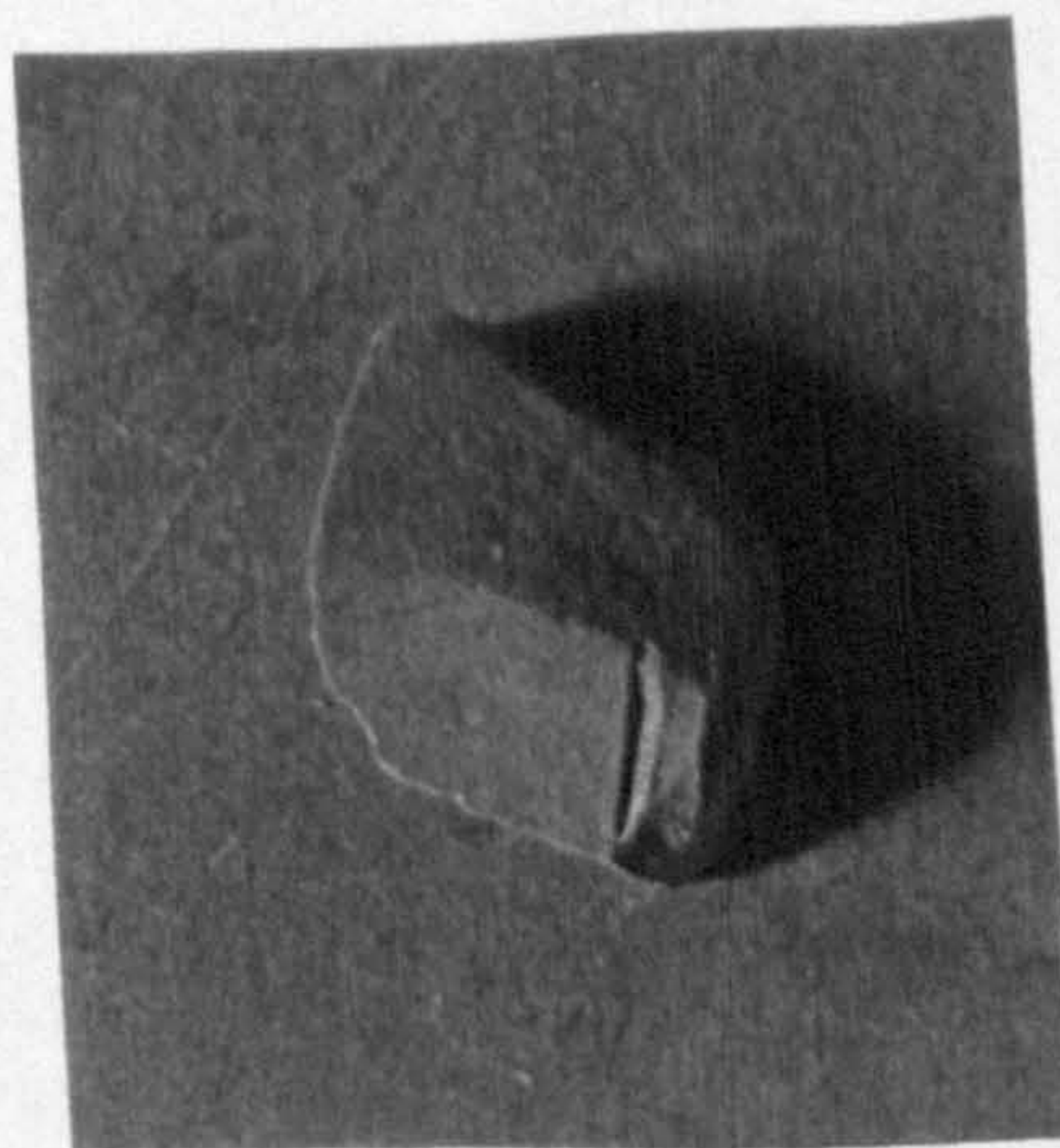
246



247

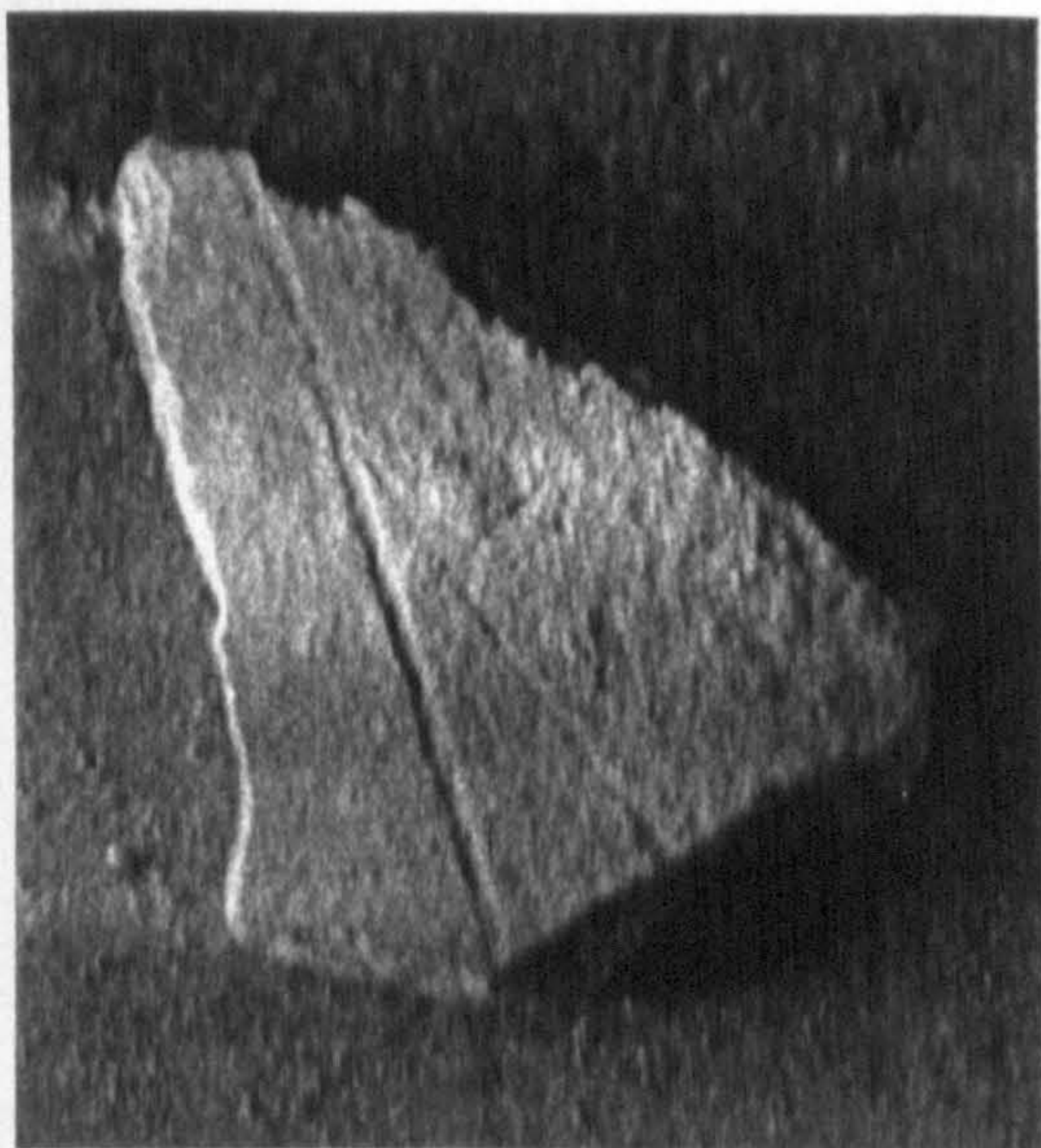


248

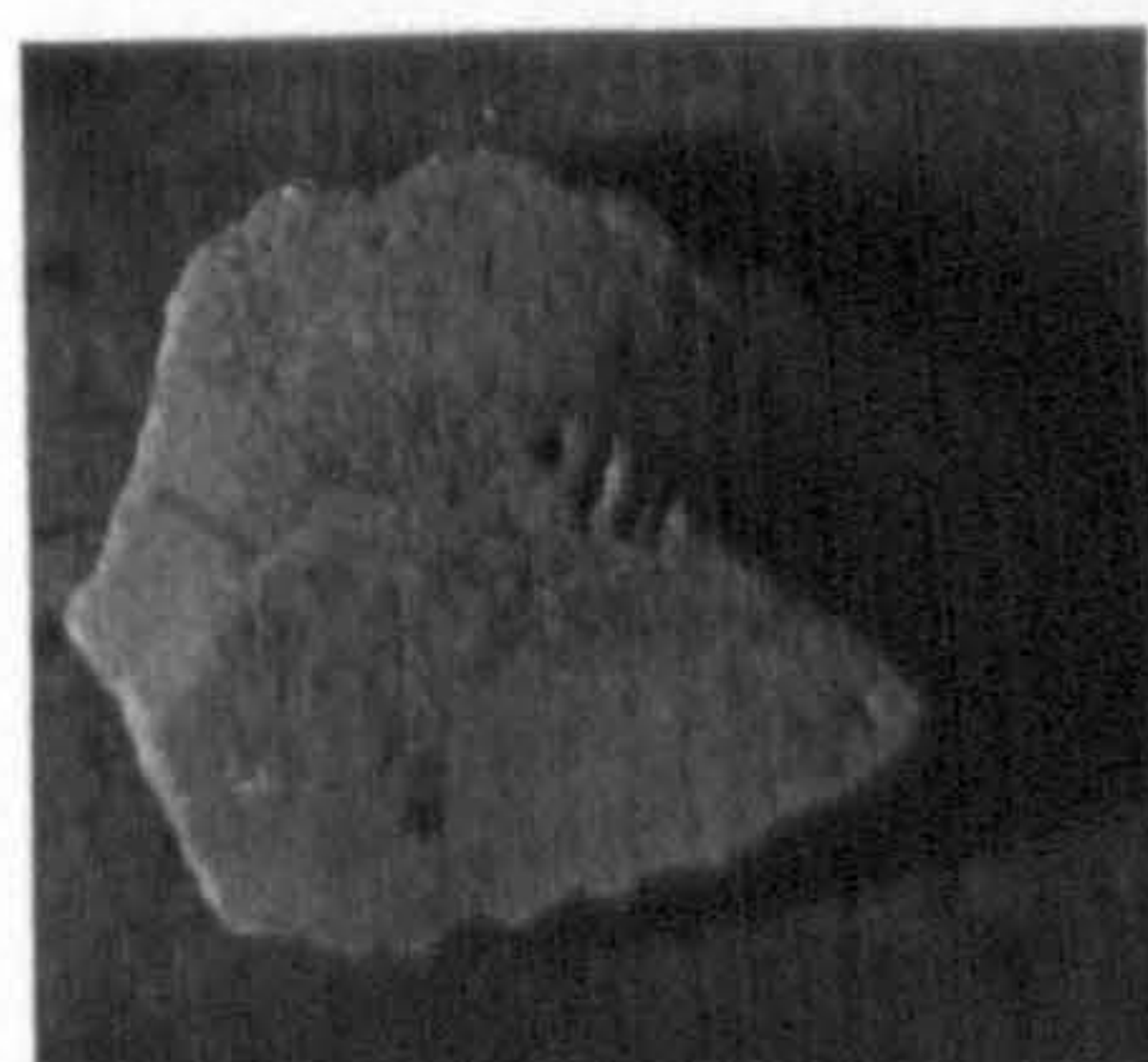


249

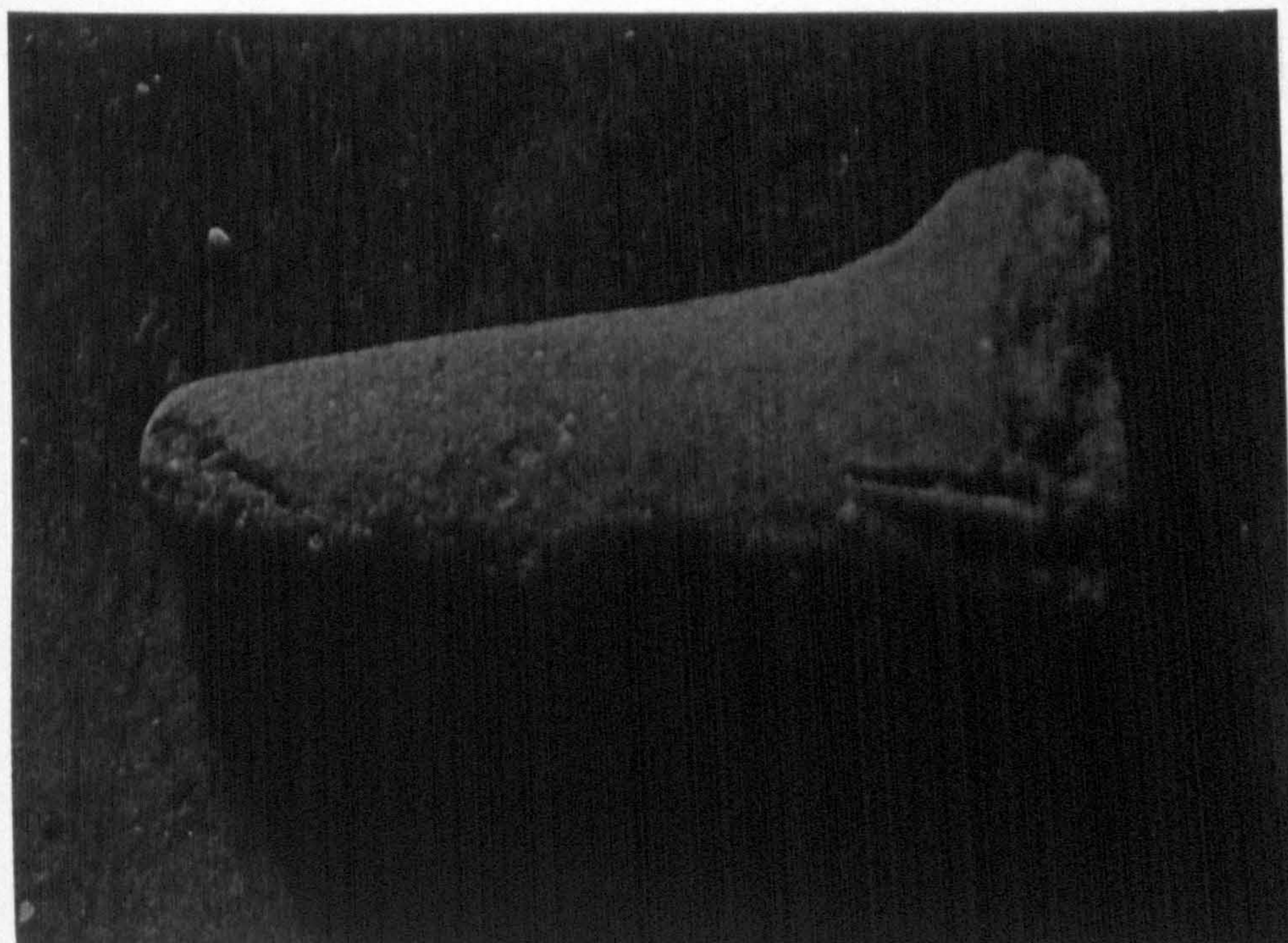
LVI. Phylakopi 1974-77 245-249. Various scales



250

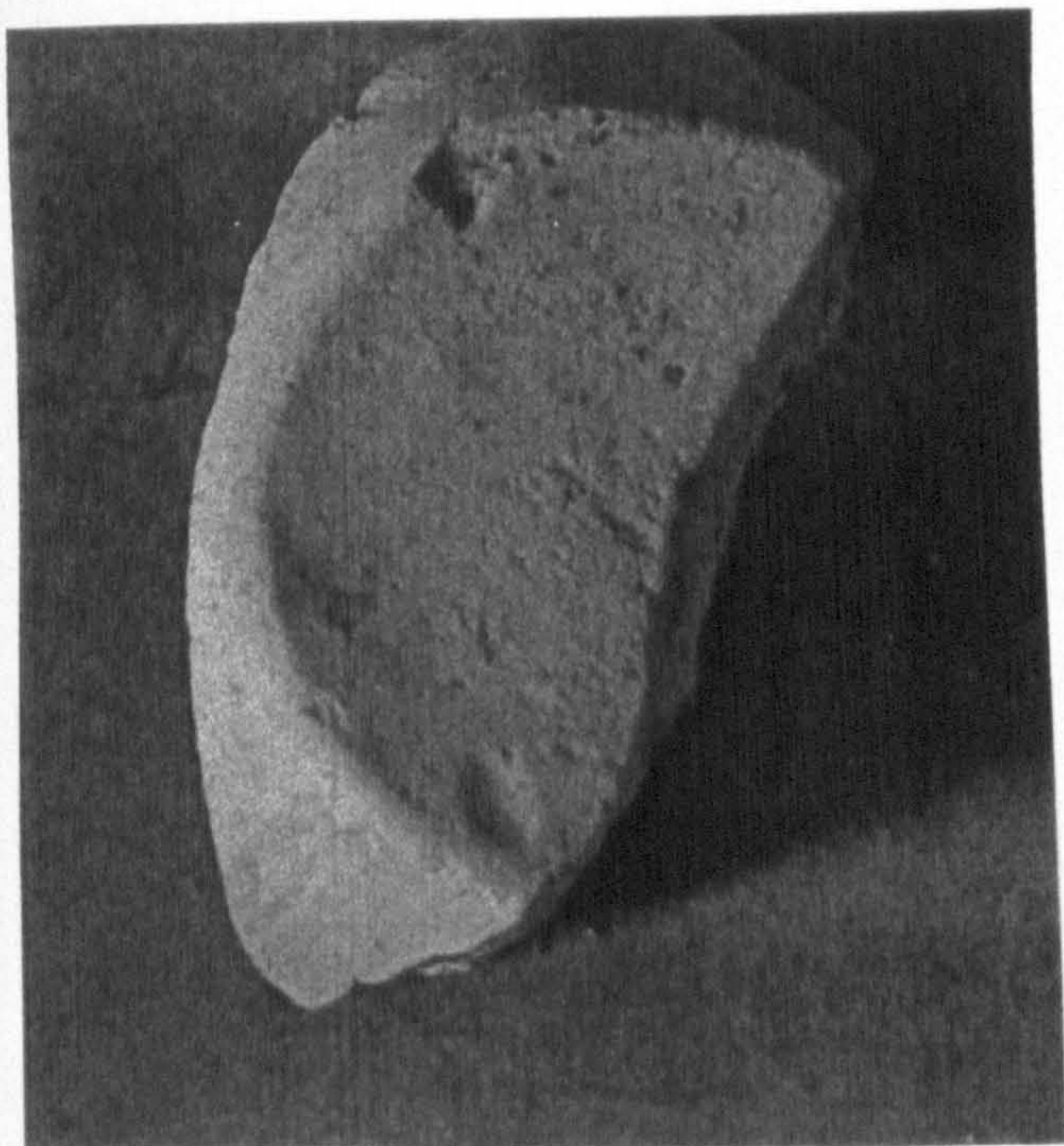


251



253

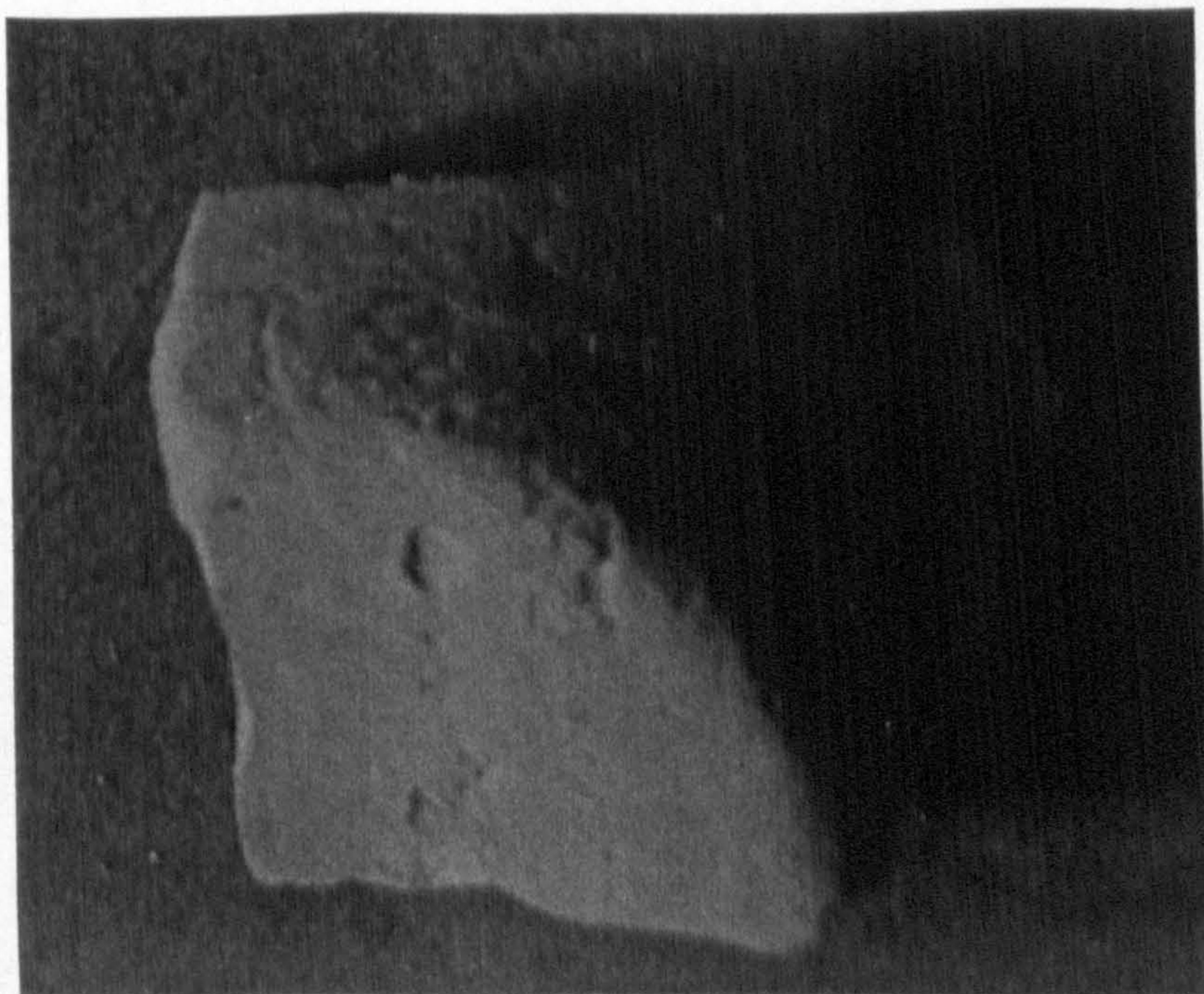
LVII. Phylakopi 1974-77 250,251,253. Various scales



254

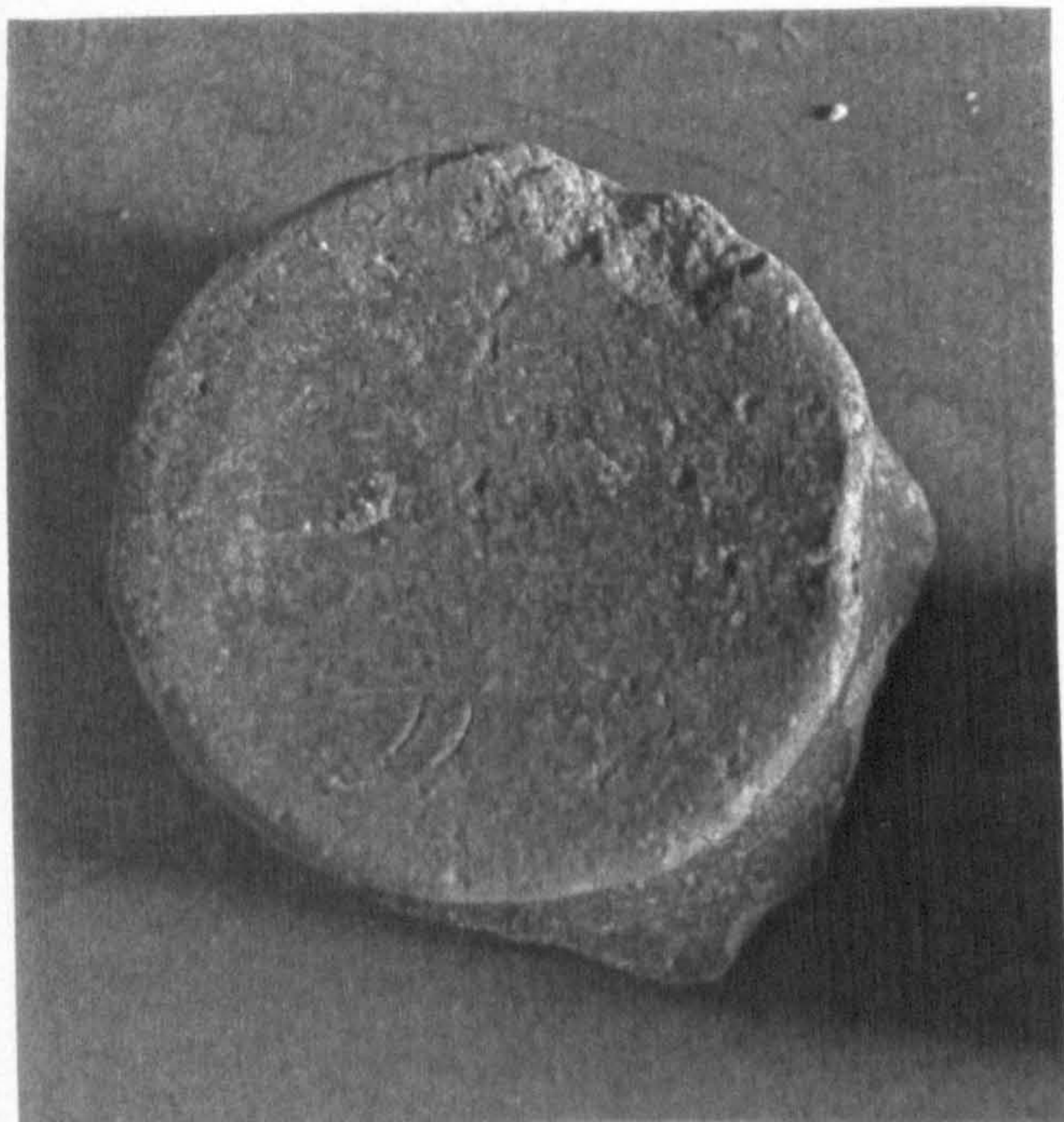


255



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LVIII. Phylakopi 1974-77 254-256. Various scales



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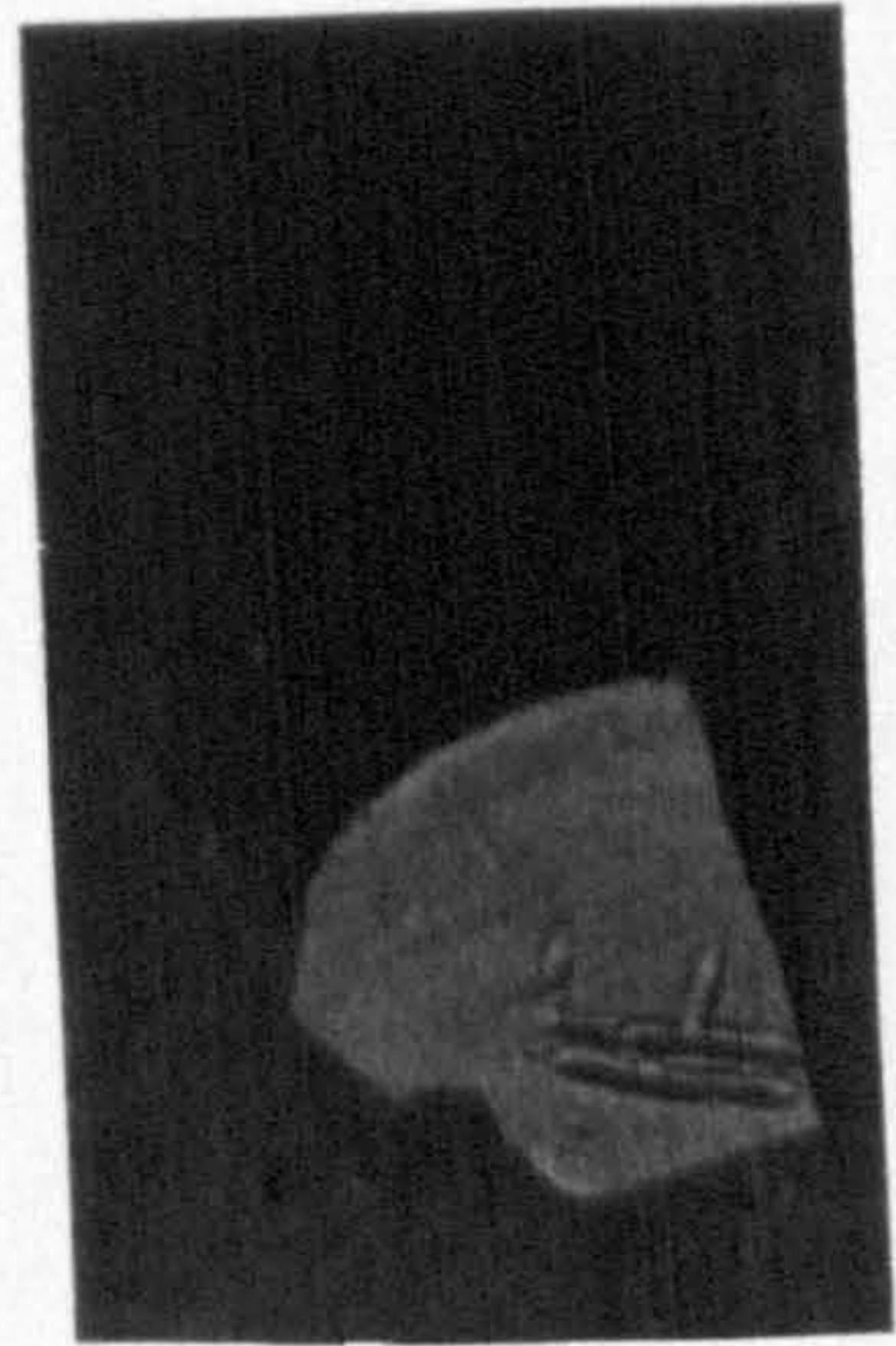


260

LIX. Phylakopi 1974-77 257,260. Various scales



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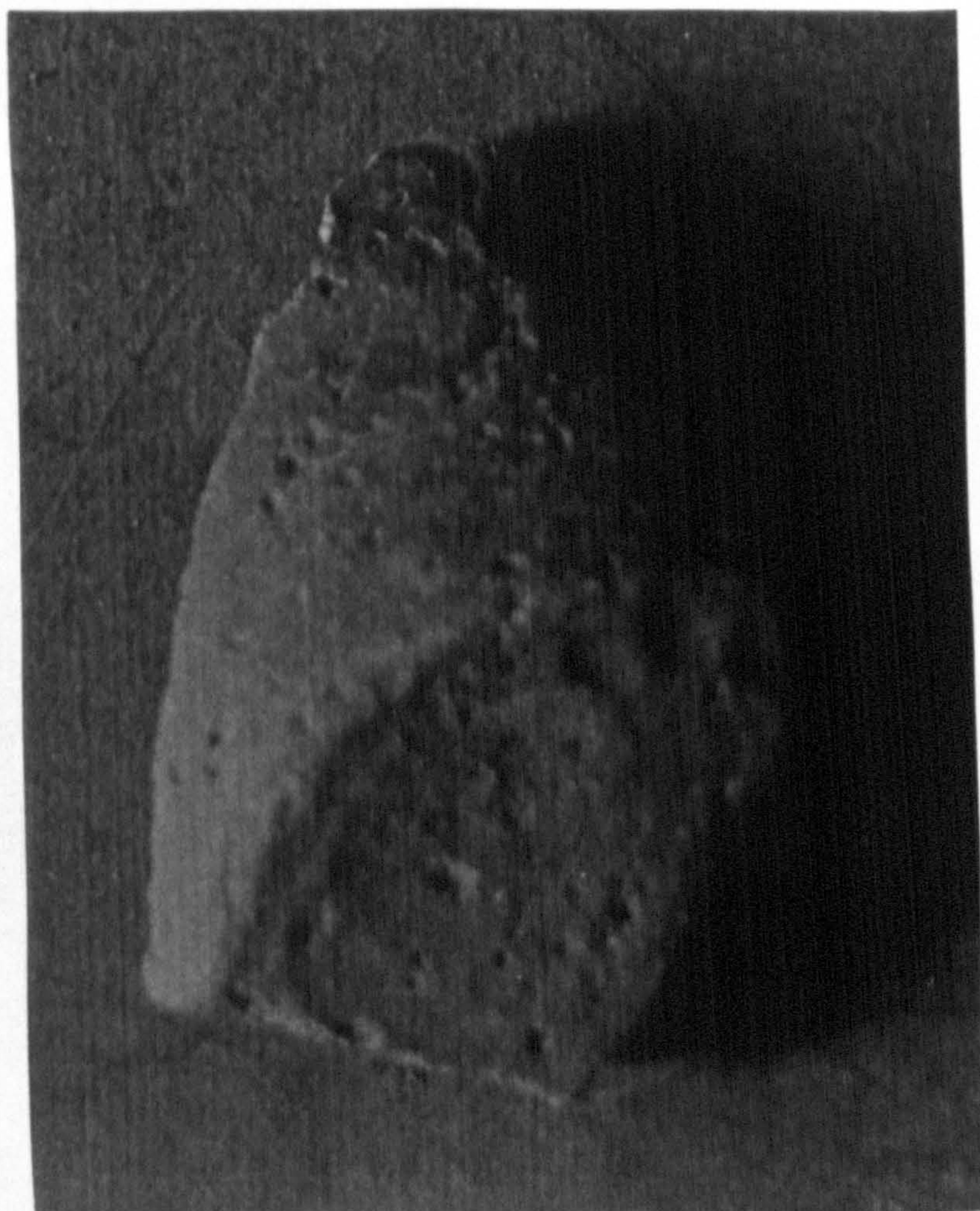


262

LX. Phylakopi 1974-77 261-263. Various scales

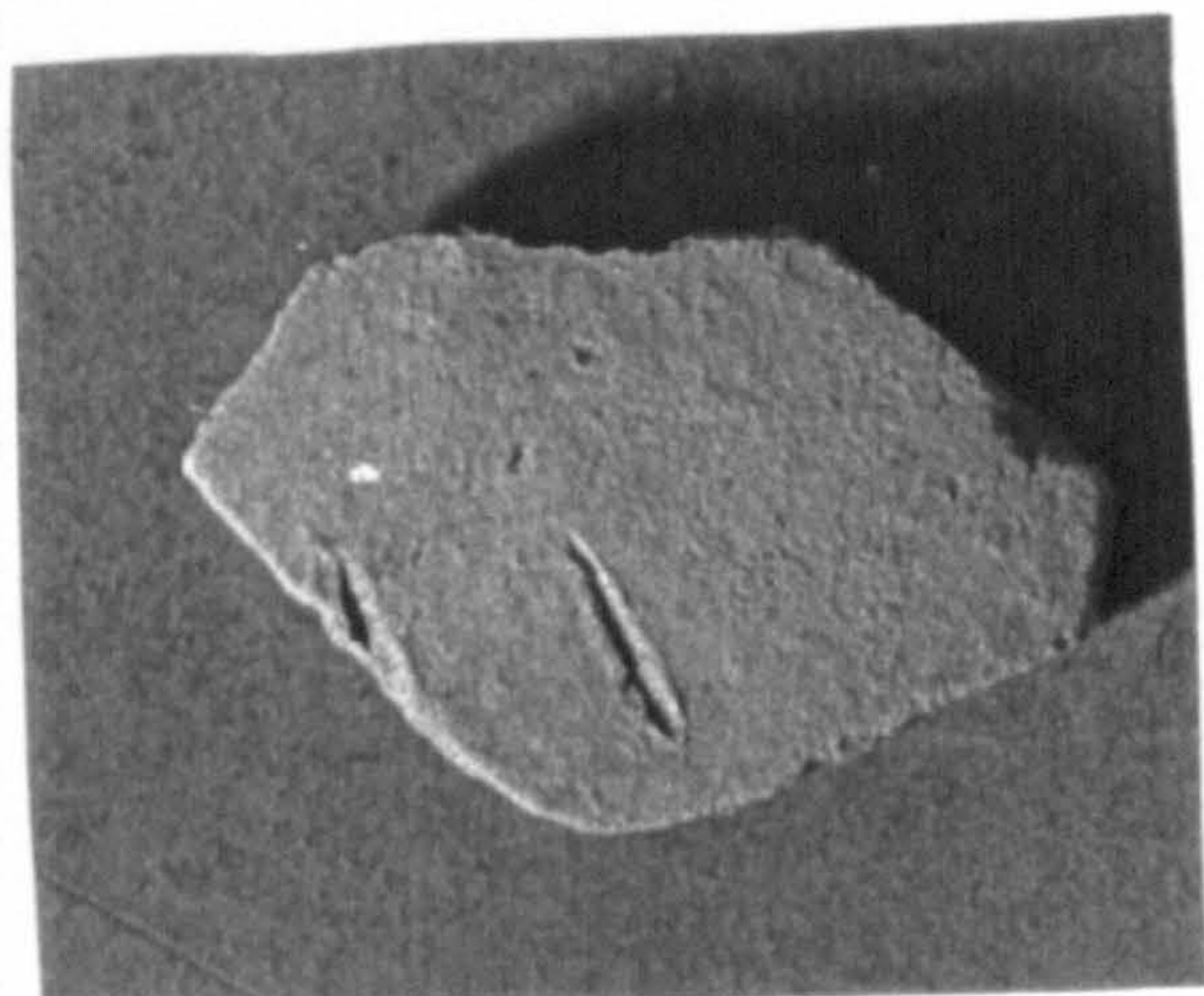


264

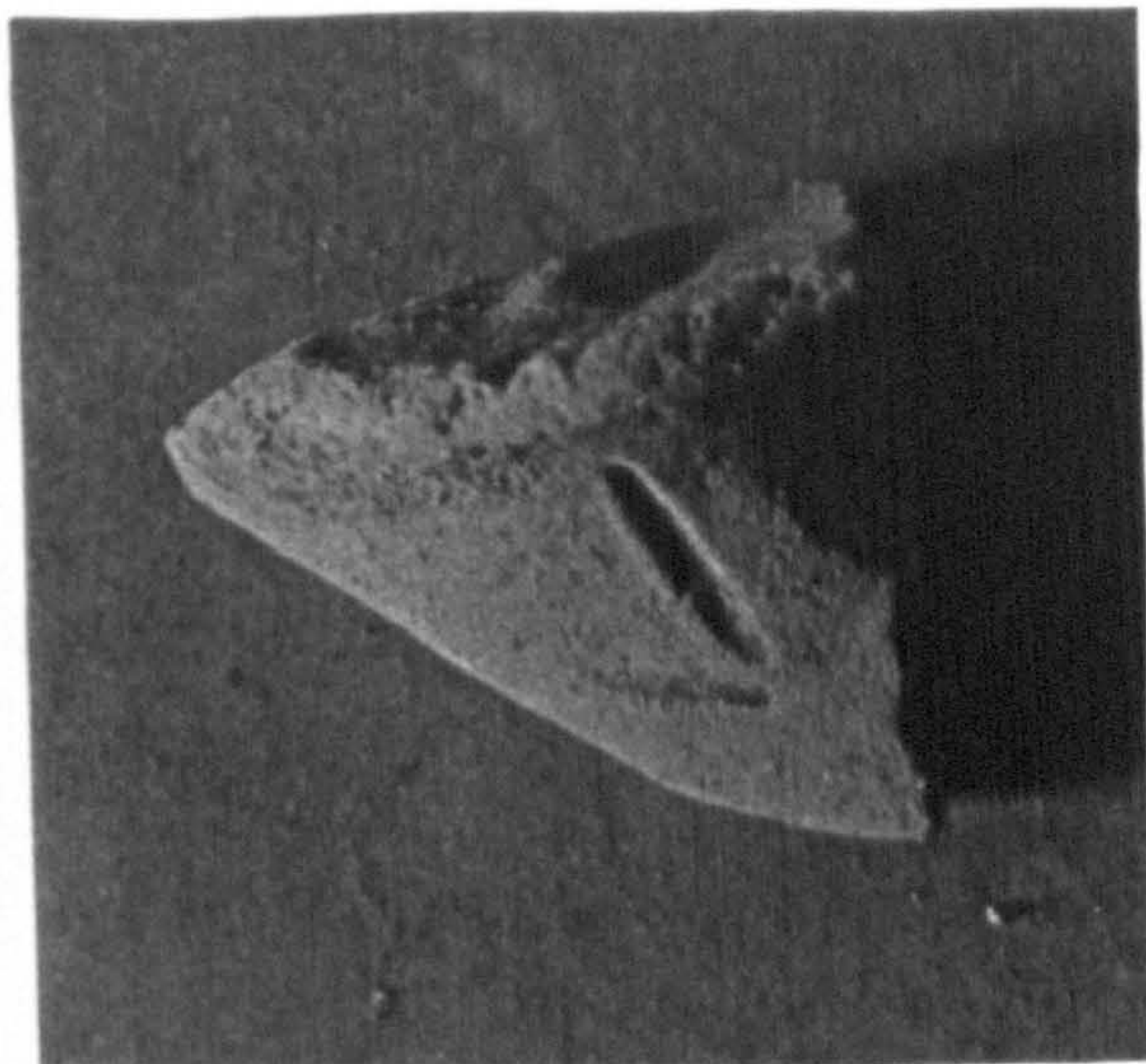


265

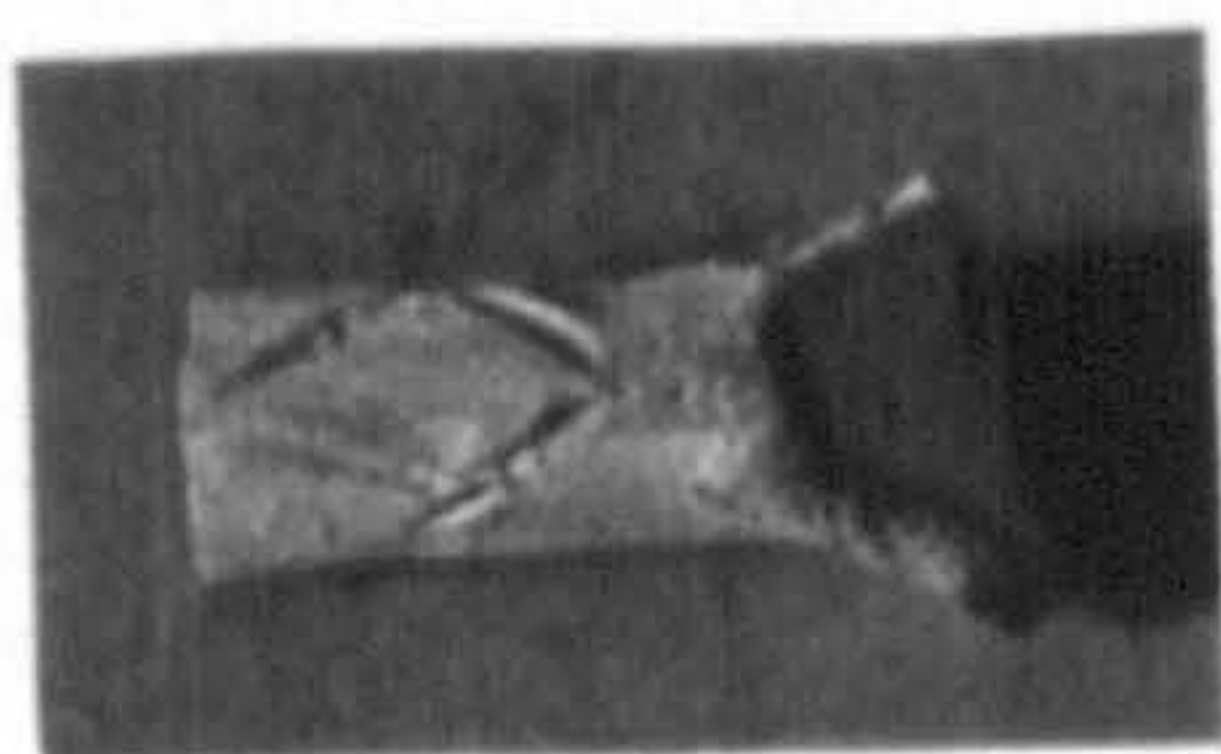
LXI. Phylakopi 1974-77 264,265. Various scales



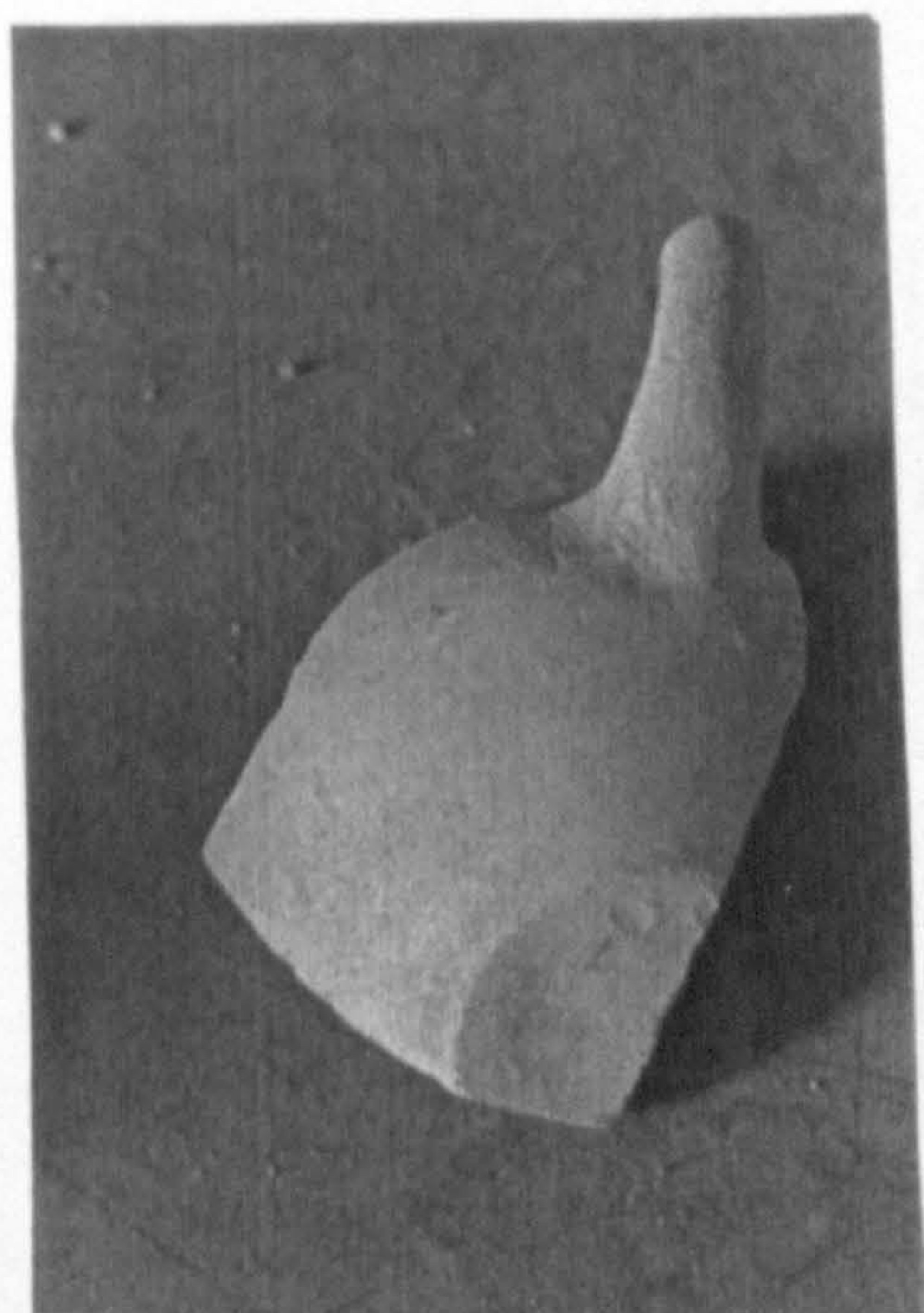
266



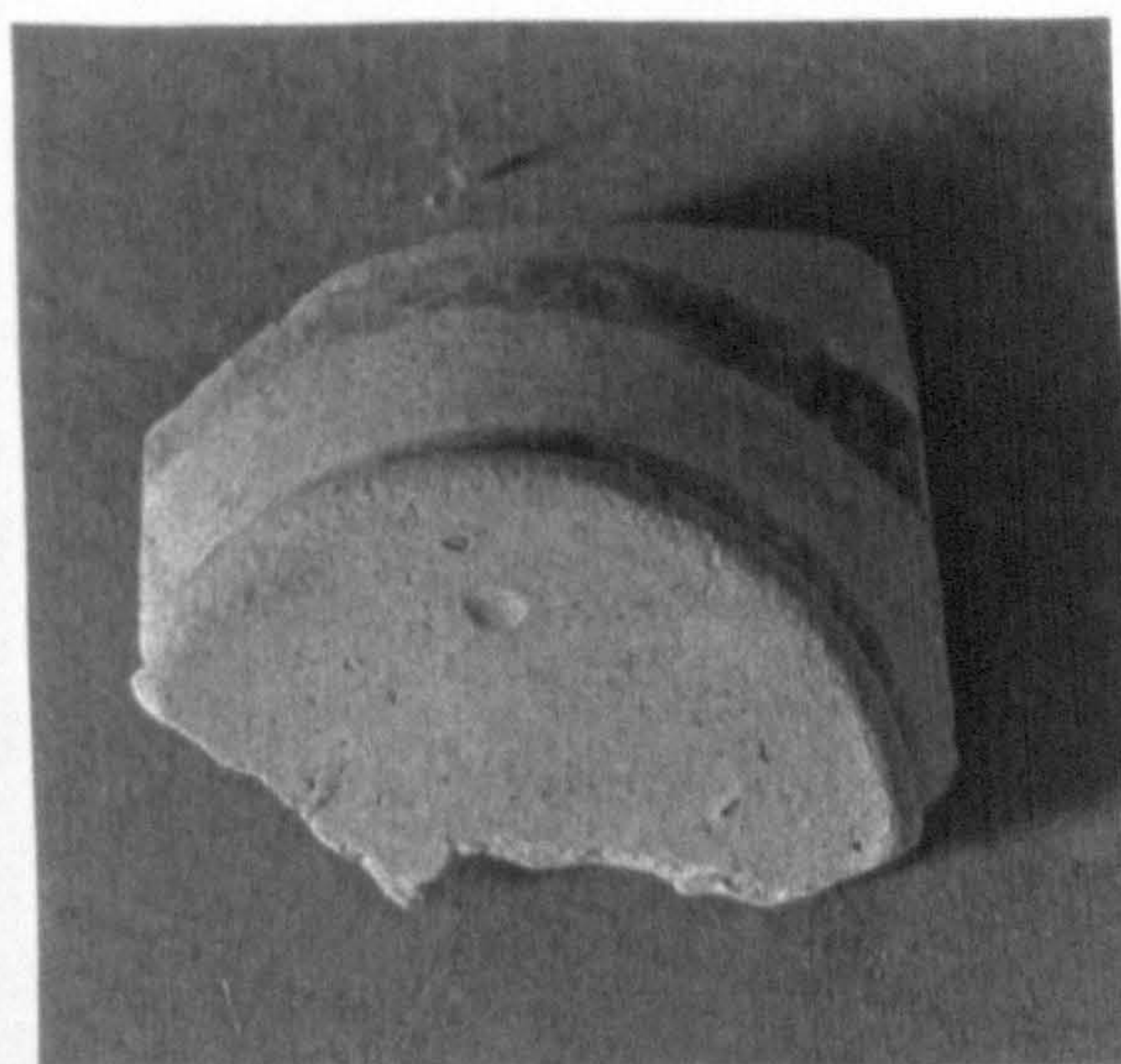
267



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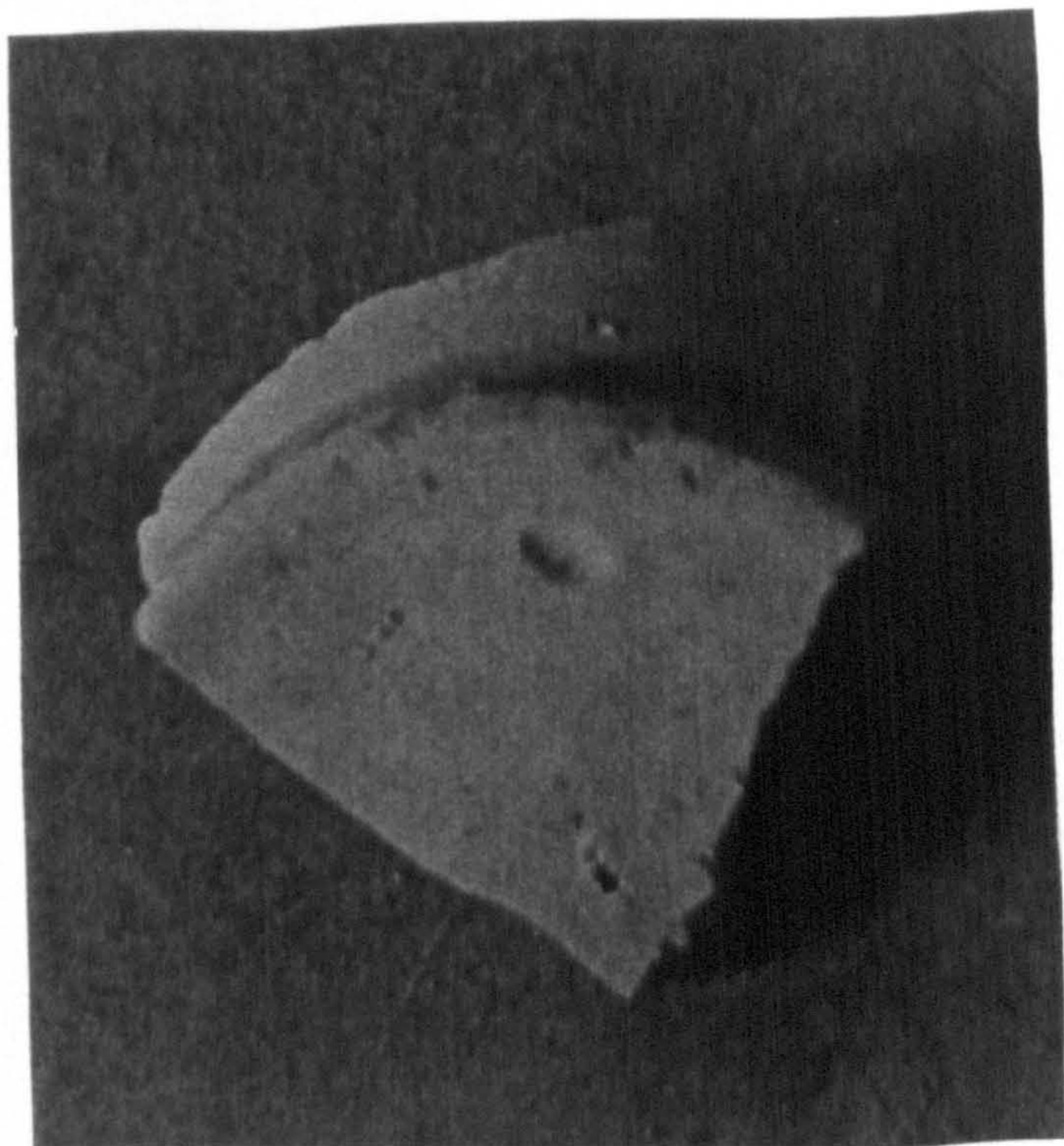


269

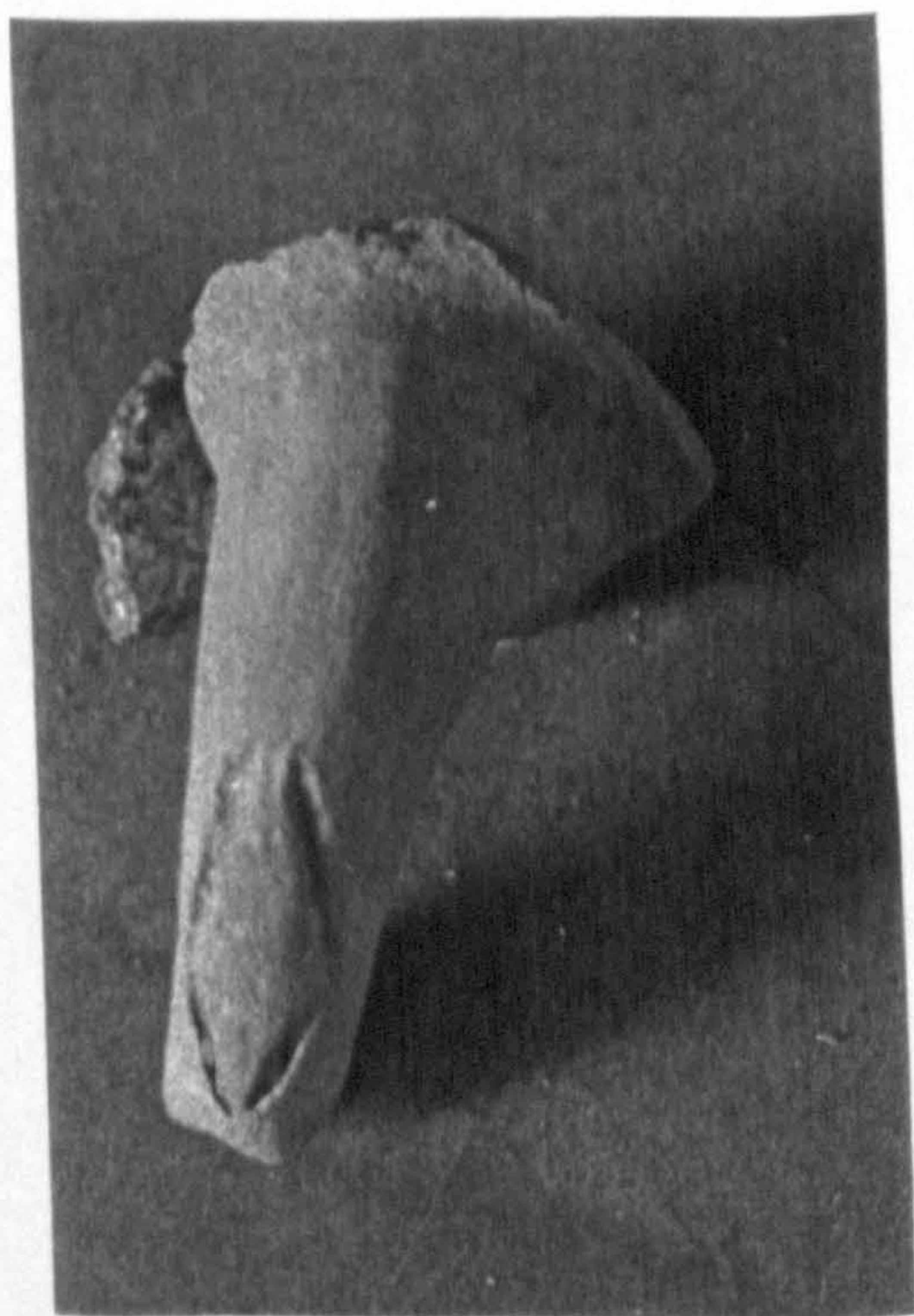


270

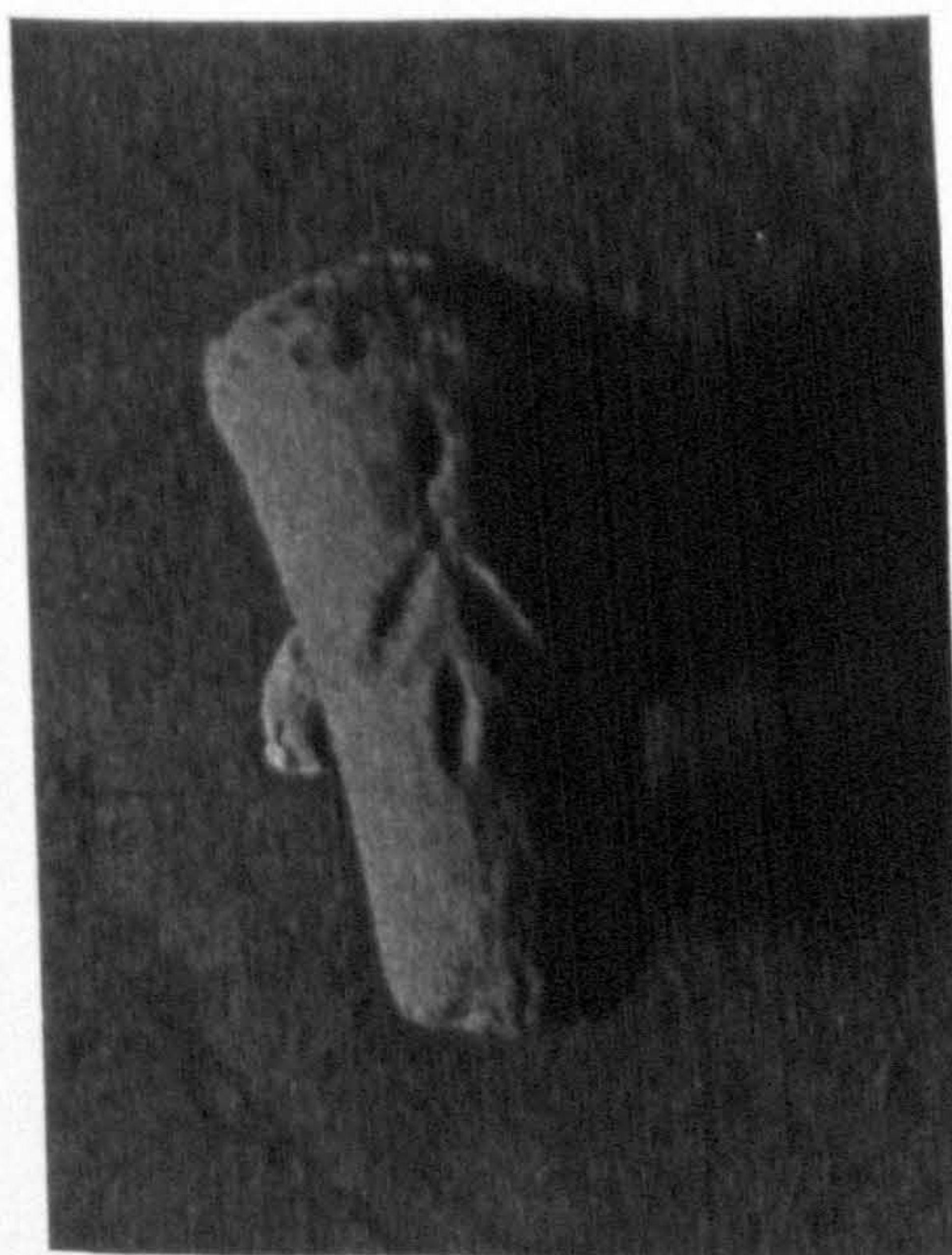
LXII. Phylakopi 1974-77 266-270. Various Scales



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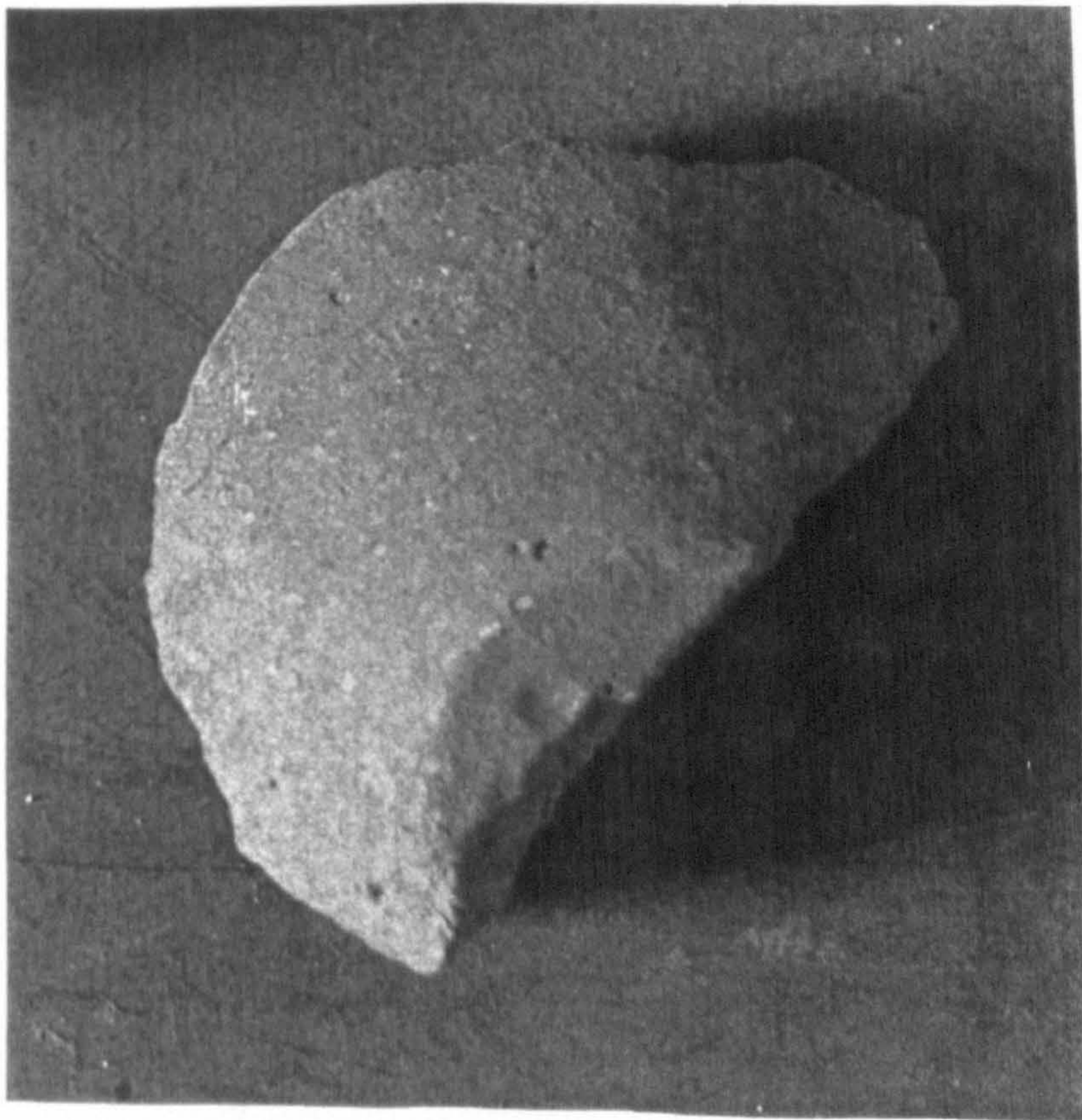


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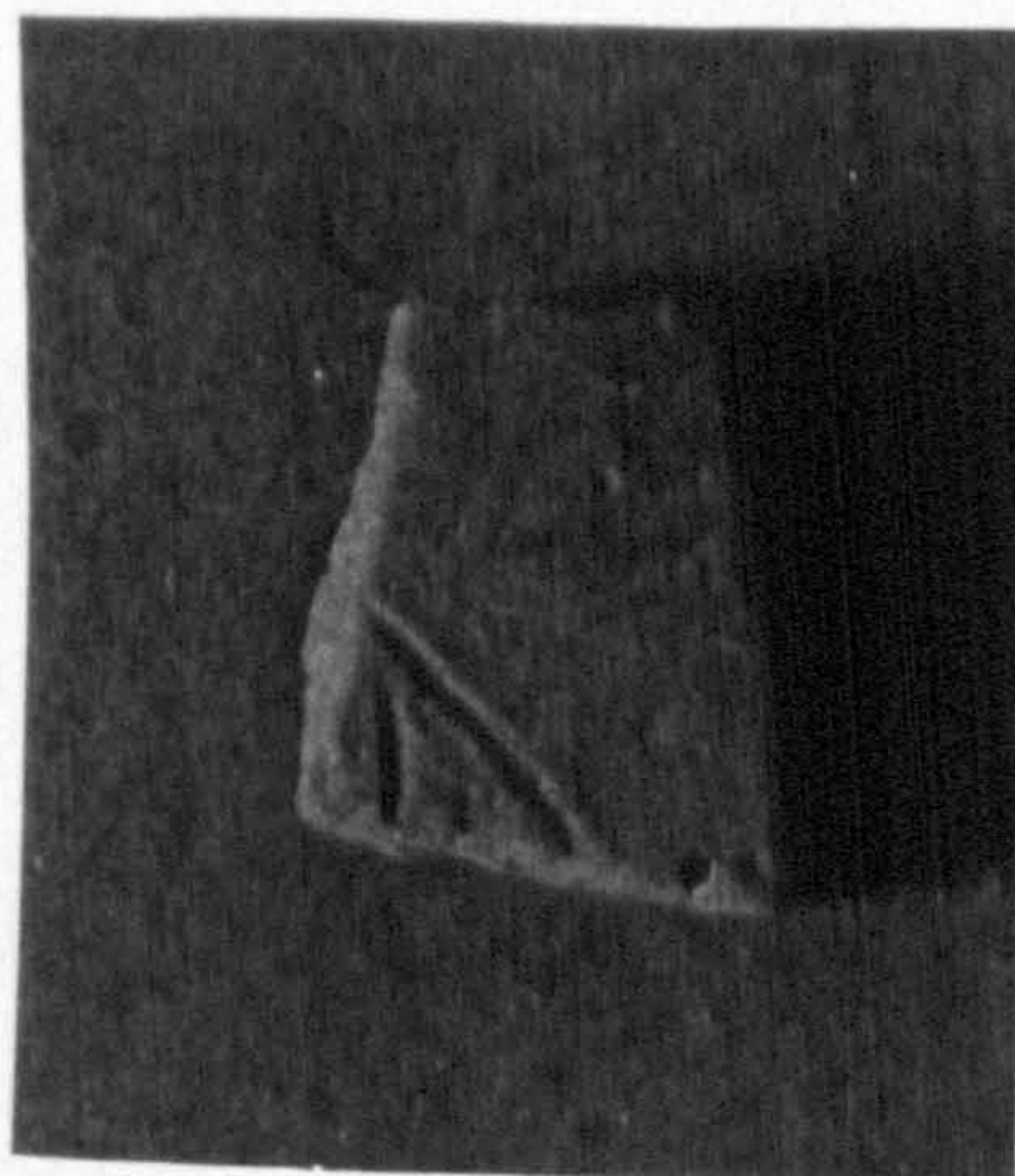
LXII. Phylakopi 1974-77 271-273. Various scales



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LXIII. Phylakopi 1974-77 274-276. Various scales